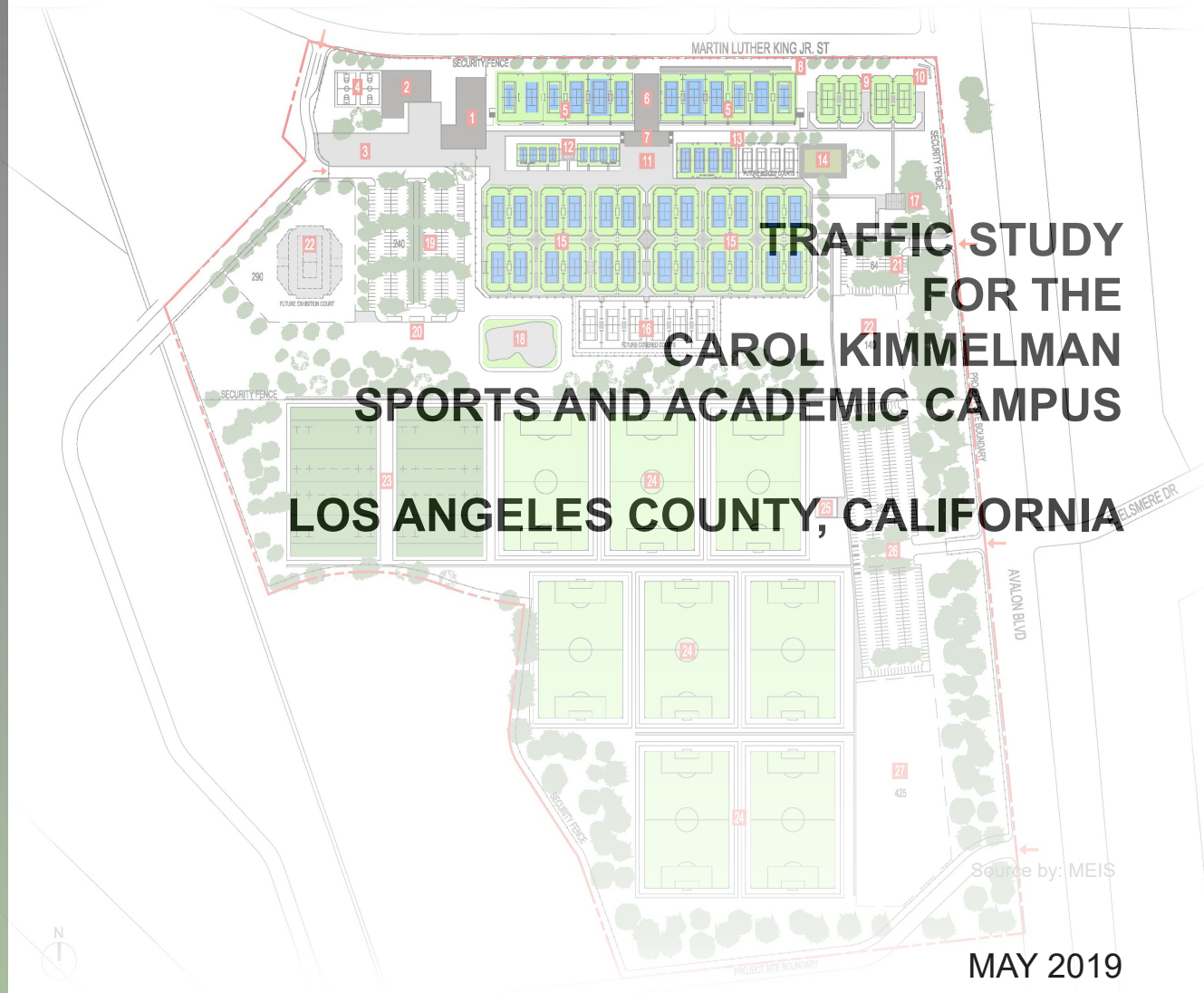
APPENDIX K

Traffic Impact Analysis



TRAFFIC STUDY FOR THE CAROL KIMMELMAN SPORTS AND ACADEMIC CAMPUS

LOS ANGELES COUNTY, CALIFORNIA

MAY 2019

PREPARED FOR

CAROL KIMMELMAN CENTER, LLC

PREPARED BY

Gibson transportation consulting, inc.

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FOR THE
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Prepared for:

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Chapter 1
Introduction

This study presents the traffic impact analysis for the proposed Carol Kimmelman Sports and Academic Campus (Project). The methodology and base assumptions used in the analysis were established in conjunction with the County Department of Public Works (LACDPW).

PROJECT DESCRIPTION

The Project involves the redevelopment of a portion of the existing Links at Victoria Golf Course (VGC) with new recreation programs that would offer sports and academic enrichment services to underprivileged youth in the greater Los Angeles area and recreation programs for the public. The Project site, owned by the County of Los Angeles (County), is located at 340 Martin Luther King, Jr. Street and is bounded by Martin Luther King, Jr. Street to the north, Avalon Boulevard to the east, and the remaining portion of the VGC to the south and west. A separate development, The Creek at Dominguez Hills (The Creek), is proposed for the remaining portion of the VGC.

Specifically, the Project site occupies approximately 87 acres of the existing VGC and the Project includes three basic areas: the Learning Center, the Tennis Center, the Soccer Center, and other recreational uses as described further below:

- The Learning Center will be located at the northwest portion of the Project site on approximately one acre. The Tiger Woods Foundation has been identified as the operator. A new approximately 25,000 square foot (sf) building will house the Learning Center activities, which include daytime learning programs for elementary school students along with after-school programs for middle school through high school students. Programs will typically operate Monday through Friday, from approximately 8:30 AM to 2:00 PM during the school year for elementary school students and approximately 3:00 PM to 6:00 PM for middle to high school students. Periodic

programming and/or community events may occur from 7:00 PM to 10:00 PM on weeknights and from 10:00 AM to 5:00 PM on Saturdays.

- The Tennis Center will be located along the northern portion of the Project site on approximately 28 acres adjacent to the Learning Center. The United States Tennis Association Foundation (USTAF) has been identified as the operator. A new approximately 23,000 sf building will host a Welcome Center, along with another new building(s) providing 13,000 sf for player development activities and 5,000 sf for administrative offices. A Competition Venue will provide 12 hard tennis courts with seating for approximately 1,200 spectators. Up to 50 tennis courts of varying sizes and surfaces will also be provided for Tennis Center activities for a total of up to 62 courts plus an exhibition court[1]. Smaller ancillary buildings will be constructed for maintenance and storage activities and restrooms. The typical operational hours of the Tennis Center will be approximately 7:30 AM to 9:00 PM on weekdays and 7:00 AM to 8:00 PM on weekends. It is anticipated that the Tennis Center will occasionally host tennis tournaments and special events throughout the year.

- The Soccer Center will be located on approximately 58 acres in the southern portion of the Project site. Two multi-sport fields and eight full-size soccer fields are proposed as part of the Soccer Center, which will operate approximately 8:00 AM to 11:00 PM daily. The fields will be utilized by local schools and community users on weekdays and by youth/adult league, club, and tournament play on weekday evenings and weekends. Approximately 10,000 sf of support building(s) is also proposed adjacent to the fields to house maintenance, storage, and an administrative office. While not proposed as part of regular operation, occasional special events may be hosted at the Soccer Center.

- Additional recreational areas provided for community use throughout the site may include:

    - Exercise areas
    - Skatepark/skateboarding facilities

[1] The exhibition court is proposed as a single tennis court that will provide up to 1,200 seats (separate from the Competition Venue); use of the exhibition court is not anticipated to be a part of the regular operation (it is reserved for special event use).

- Walking/running trails
- Other passive recreational areas

A total of 1,547 surface automobile parking spaces will be provided on-site, through a combination of 692 marked parking stalls located in three parking lots and approximately 855 spaces located in three overflow parking areas. A total of 240 marked stalls and 290 overflow parking stalls are located toward the northwest corner of the Project site and accessible from Martin Luther King, Jr. Street[2]. The 64 spaces located toward the northeast corner of the site are designated for employees only on a daily basis. A total of 388 marked stalls are centrally located on Avalon Boulevard and accessed through the Elsmere Drive driveway. Another 140 and 425 overflow spaces are located north and south of the main Avalon Boulevard parking lot, respectively.

Primary site access will be provided by new driveways on Martin Luther King, Jr. Street at the northwest boundary of the site and on Elsmere Drive at Avalon Boulevard. Both driveways will provide full access (i.e., left turns in and out), with the Elsmere Drive driveway operating with a traffic signal. A limited secondary access will be provided by a new right-turn-only driveway on Avalon Boulevard, immediately south of Martin Luther King, Jr. Street, into the employee parking lot. Both the driveway and parking lot will be restricted to employees only during typical daily operation.

On days with special events, the employee driveway will allow access into the site and into an overflow parking area for event visitors. Additional special event access will be provided by a new signalized driveway on Avalon Boulevard. Access to the overflow parking lots through both the employee parking lot and the new driveway is facilitated by internal drive aisles that will allow internal circulation between the multiple parking lots. Special event day site access will be managed through the development of an Event Management Plan to assist the operation of traffic.

The Project is anticipated to be complete by 2020. The conceptual Project site plan is shown in Figure 1.

[2] The 290 overflow spaces identified here are located within the footprint of the proposed tennis exhibition court. When the exhibition court is constructed, the removal of the 290 overflow spaces will result in a reduced parking supply of 1,257 spaces.

PROJECT LOCATION AND TRANSPORTATION ANALYSIS STUDY AREA

As described above, the Project is located on a portion of the existing VGC, which is a County-owned property. Most nearby land uses are primarily recreational, with Victoria Park located immediately to the north and residential and commercial uses to the east and south.

The Project site is located approximately 0.3 miles northeast of the San Diego Freeway (I-405), approximately 0.75 miles east of the Harbor Freeway (I-110), and approximately 1.3 miles south of the Gardena Freeway (SR 91). These freeways provide regional access to and from Los Angeles and Orange County.

As shown in Figure 2, the transportation analysis Study Area includes a geographic area generally bounded by Vermont Avenue, SR 91, Central Avenue, and 223rd Street. Detailed transportation analyses were conducted at key intersections within the Study Area.

TRAFFIC ANALYSIS METHODOLOGY

Study Scope and Analysis Conditions

The scope of analysis for this study was developed in consultation with the County. The base assumptions and technical methodologies (i.e., trip generation, study locations, analysis methodology, etc.) were identified as part of the study approach and were outlined in a Memorandum of Understanding (MOU), which was submitted to the LA for review. A copy of the MOU is provided in Appendix A.

This study analyzed the potential Project-generated traffic impacts on the street system in the vicinity of the Project site as compared to existing conditions at the time the Project's Notice of Preparation (NOP) was issued (July 2018) and projected future conditions at the time the Project is expected to be completed (Year 2020). Potential intersection impacts were evaluated for typical weekday morning (7:00 AM to 10:00 AM) and afternoon (3:00 PM to 6:00 PM) peak periods. The Saturday midday (12:00 PM to 2:00 PM) peak period was also analyzed to represent typical weekend conditions. A total of 31 intersections in the vicinity of the Project site were selected for

the detailed weekday traffic analysis, including 29 existing intersections[3], one intersection to be constructed with the Project and one proposed by The Creek). The Saturday analysis focused on 17 intersections[4] selected from the weekday analysis based on location and access to the Project site. The study intersections, along with their analyzed period, are noted in Table 1 and their locations are illustrated in Figure 2.

This traffic study evaluated the potential for impacts caused by the Project on the street and highway systems surrounding the Project site. The Project site is a County-owned facility and is subject to the guidelines utilized by the County. As such, LACDPW requested that the transportation study follow the criteria contained in its *Draft Traffic Impact Analysis Report Guidelines* (2013) (County TIA Guidelines). The following traffic conditions were developed and analyzed as part of this study:

- Existing Conditions (Year 2018) – The analysis of existing traffic conditions provides a basis for the assessment of future traffic conditions. The Existing Conditions analysis includes a description of key area streets and highways, traffic volumes and current operating conditions, and transit service in the Study Area. For the purposes of this analysis, the Existing Conditions in this traffic study represent conditions as of the issuance of the Project's NOP. Intersection turning movement counts were collected in February, May, August, and September 2018. Fieldwork (lane configurations and signal phasing) for the analyzed intersections was also collected in September 2018. Intersection lane configurations are provided in Appendix B, traffic count worksheets in Appendix C, and LOS worksheets in Appendix D.

- Existing with Project Conditions (Year 2018) – This analysis condition projects the potential intersection operating conditions that could be expected if the Project were built under existing conditions. This analysis evaluates the potential Project-related traffic impacts as compared to existing conditions. Mitigations, if necessary, will be identified to mitigate Project caused impacts.

- Future with Project Conditions (Year 2020) – This analysis projects the potential intersection operating conditions that could be expected with the addition of cumulative background traffic to the Existing with Project Conditions. This analysis identifies the potential incremental impacts of cumulative development, which includes both the Project at full buildout, prior to mitigation, and the addition of projected cumulative growth in the study area. Mitigations, if necessary, will be identified to mitigate the cumulative impacts of development.

[3] Of the 29 existing intersections, 27 are signalized and two are stop sign controlled.

[4] The 17 intersections selected for Saturday analysis include 15 existing signalized intersections, one new intersection to be constructed with the Project, and one new intersection proposed by a related project.

Intersection Analysis Methodology

A detailed intersection capacity analysis was conducted for the weekday morning and afternoon peak hours for each of these intersections under the three scenarios identified above. Peak period turning movement counts were conducted at the 29 study intersections in February, May, August, and September 2018 during the weekday morning and afternoon peak periods.

Level of service (LOS) is a qualitative measure used to describe the condition of traffic flow on the street system, ranging from excellent conditions at LOS A to overloaded conditions at LOS F. LOS D is typically recognized as the minimum acceptable LOS in urban areas. LOS definitions are provided in Table 2.

Intersection capacity calculations were conducted to measure the LOS of the intersections using an overall intersection capacity of 1,600 vehicles per hour per lane and adding a factor of 0.10 to account for the yellow interval clearance. The existing or projected volumes through an intersection are compared to the capacity of the intersection to calculate a volume-to-capacity (V/C) ratio used to determine the LOS at the intersection.

In accordance with County guidelines, the LOS analyses for signalized intersections were conducted using the Intersection Capacity Utilization (ICU) methodology from *Highway Capacity Manual, Special Report 209* (Transportation Research Board, 2000) to obtain the V/C ratio for signalized intersections. Traffix software was used to calculate the ICU value for signalized intersections. Vistro software was used to implement the *Highway Capacity Manual, 6th Edition* (Transportation Research Board, 2016) (HCM) methodology to identify the amount of delay for the stop-controlled intersections. As requested by the County, the stop-controlled intersection of Hamilton Avenue & I-110 Southbound ramps (Intersection #25) was also analyzed using the ICU methodology.

A signal warrant analysis was also performed for unsignalized intersections. It should be noted that the determination that an unsignalized intersection meets the criteria of a traffic signal warrant does not in itself require the installation of a signal. Rather, the decision on whether a traffic signal should be installed is made by the governing jurisdictions taking into consideration other factors such as distance to adjacent signalized intersections and interruption to traffic flow along the major street.

IMPACT CRITERIA AND SIGNIFICANCE THRESHOLDS

Intersections

Based on discussions with the County, the significance of the potential impacts of Project generated traffic at the signalized study intersections was determined using criteria identified in the County TIA Guidelines, which indicate that a project is considered to have a significant traffic impact on a signalized intersection if the increase in the V/C ratio attributable to the project exceeds a specific threshold depending on the pre-Project intersection LOS. The County has developed a sliding scale methodology in which the minimum allowable increase in the V/C ratio attributable to a project decreases as the V/C ratio of the intersection increases:

Intersection Conditions without Project Traffic		Project-related Increase in V/C Ratio
LOS	V/C	
A, B	0.00 – 0.70	Causing V/C to 0.75 or worse
C	0.71 - 0.80	Equal to or greater than 0.04
D	0.81 - 0.90	Equal to or greater than 0.02
E, F	> 0.91	Equal to or greater than 0.01

Source: County of Los Angeles.

The relative impact of the added traffic volumes to be generated by the Project and cumulative projects was evaluated based on analysis of existing and future operating conditions at the study intersections, with and without the Project. Using these criteria, for example, a project would not have a significant impact at an intersection if it is operating at LOS C after the addition of project traffic and the incremental change in the V/C ratio is less than 0.040. If the intersection, however, is operating at LOS F after the addition of project traffic and the incremental change in the V/C ratio is 0.010 or greater, the project would be considered to have a significant impact. A project is considered to have a significant impact if an intersection operates at LOS A or B and the addition of project traffic causes the V/C ratio to increase to 0.75 or higher; however, no significant impact is projected if the intersection is projected to operate at LOS A or B before and after a project regardless of the volume of traffic added to the intersection or the incremental change in the V/C ratio. In general, according to the significant impact criteria, the higher the V/C ratio, the lower the amount of project traffic that can be added before causing a significant impact.

Because many of the study intersections are located within the City of Carson, a supplemental analysis using the City of Carson significant impact criteria and analysis methodology was prepared for informational purposes and is provided in Appendix E.

ADDITIONAL TRAFFIC ANALYSES

Congestion Management Program

An analysis also was conducted according to *2010 Los Angeles County Congestion Management Program* (Los Angeles County Metropolitan Transportation Authority [Metro], 2010) (CMP) guidelines. The CMP is a State-mandated program that serves as the monitoring and analytical basis for transportation funding decisions in the County made through the Regional Transportation Improvement Program and State Transportation Improvement Program processes. The CMP requires that a Traffic Impact Analysis (TIA) be performed (1) for all CMP arterial monitoring intersections where a project would add 50 or more trips during either the morning or afternoon weekday peak hours and (2) all mainline freeway monitoring locations where a project would add 150 or more trips (in either direction) during the morning or afternoon weekday peak hours. In addition, it requires a review of potential impacts to the regional transit system.

The required CMP analyses were performed, as detailed in Chapter 9, in accordance with the TIA guidelines referenced in the CMP.

State of California Senate Bill No. 743

Senate Bill 743 (Steinberg, 2013) (SB 743), made effective in January 2014, requires the Governor's Office of Planning and Research to update the California Environmental Quality Act guidelines regarding the analysis of transportation impacts. Under SB 743, the focus of transportation analysis will shift from driver delay to vehicle miles traveled (VMT), reduction of greenhouse gas emissions (GHG) and creation of multimodal networks. Although originally scheduled to be fully implemented in guidelines by January 1, 2016, an extension has allowed cities more time to establish an analysis methodology.

The Project characteristics (e.g., its location, access to other nearby destinations, pedestrian connections, bicycle amenities, etc.) would encourage non-auto modes of transportation such as walking, bicycling, carpool, vanpool, transit, etc. Further, the school children attending the Learning Center and many of the teams competing at the venues will be arriving via bus or carpool, which reduces the number of single occupant vehicles traveling to/from the Project site. The Project would, therefore, reduce vehicle trips and encourage walking, public transit ridership, carpooling, and bicycle travel, which results in corresponding reductions in VMT, air quality emissions and transportation-related GHG emissions.

Supplemental California Department of Transportation (Caltrans) Analysis

An analysis of Caltrans facilities was conducted using HCM methodology, in accordance with *Local Development – Intergovernmental Review Program Interim Guide* (Caltrans, Approved September 2016) (Caltrans Interim Guide). The Caltrans supplemental analysis is provided in Chapter 10.

Additional Review and Analysis

In addition to the analyses discussed above, this study includes a review of the Project access, circulation and parking. A construction impact analysis is provided in Appendix F.

ORGANIZATION OF REPORT

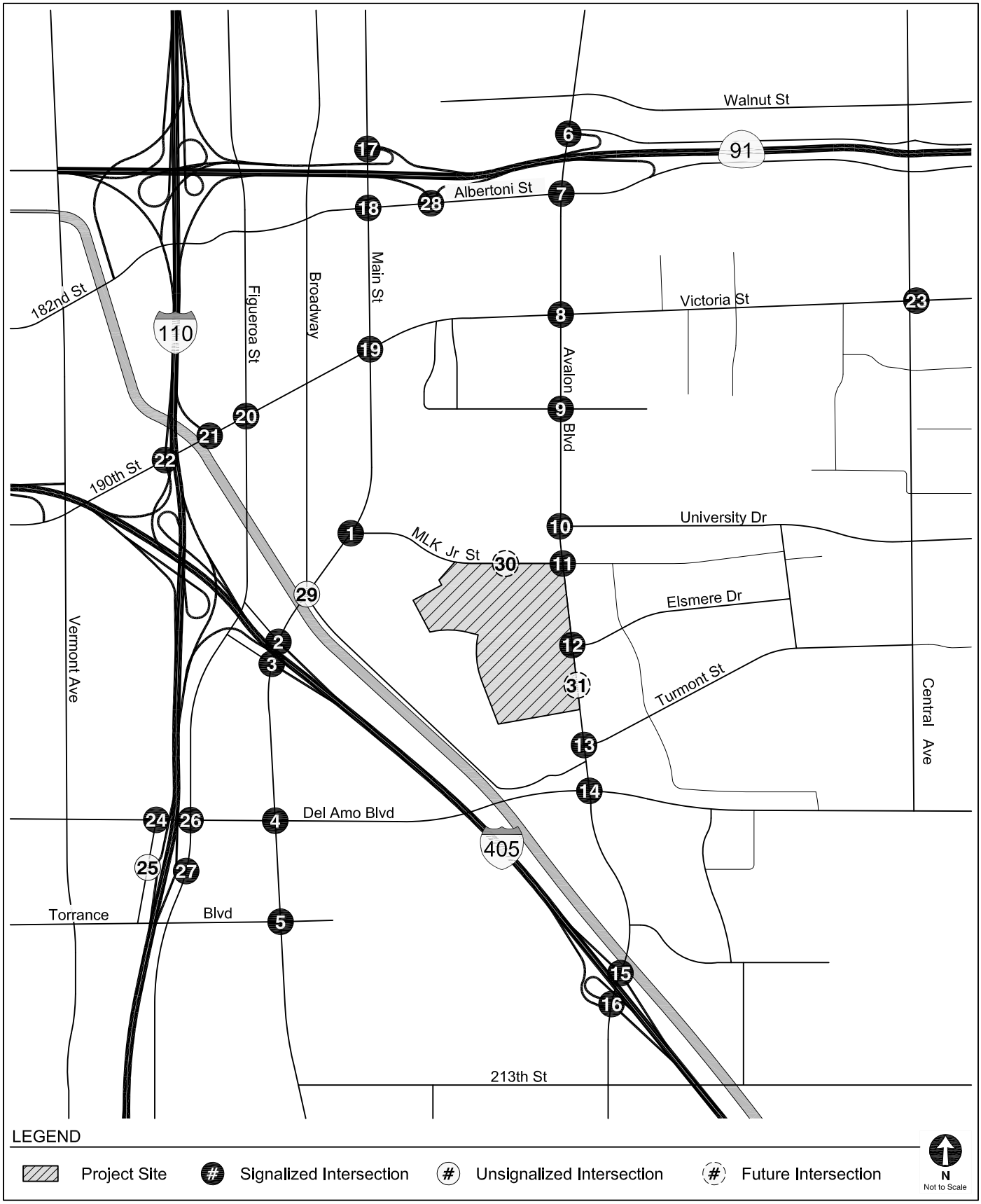
This report is divided into 13 chapters, including this introduction. Chapter 2 describes the existing circulation system, traffic volumes, and traffic conditions in the Study Area (year 2018). Chapter 3 forecasts the Project traffic. Chapter 4 presents the intersection operating conditions associated with completion and occupancy of the Project under Existing Conditions (year 2018). Chapter 5 presents the intersection operating conditions associated with construction of the Project under Future Conditions (Year 2020). Chapter 6 presents the signal warrant analysis for the unsignalized intersections. Chapter 7 details the proposed mitigation measures. Chapter 8 describes the Event Management Plan for the Project. Chapter 9 presents the regional CMP

analysis. Chapter 10 details the Caltrans analysis. Chapter 11 describes site access and internal circulation and Chapter 12 details the parking analysis. Chapter 13 provides a summary of the analyses. The Appendices contain supporting documentation and additional details of the technical analyses, as well as the additional analysis described above.

SOURCE: MEIS. February, 2019.

CONCEPTUAL SITE PLAN

FIGURE 1



STUDY AREA

FIGURE 2

TABLE 1
STUDY INTERSECTIONS

No.	N/S Street	E/W Street	Jurisdiction	Analyzed Period(s)
1.	Main Street	Martin Luther King, Jr Street	City of Carson	Weekday/Saturday
2.	Main Street	I-405 NB Off-Ramp	City of Carson/Caltrans	Weekday/Saturday
3.	Main Street	I-405 SB On-Ramp	City of Carson/Caltrans	Weekday/Saturday
4.	Main Street	Del Amo Boulevard	City of Carson	Weekday
5.	Main Street	Torrance Boulevard	City of Carson	Weekday
6.	Avalon Boulevard	Artesia Bl/SR-91 WB On-Ramp	City of Carson/Caltrans	Weekday
7.	Avalon Boulevard	Albertoni Street	City of Carson	Weekday
8.	Avalon Boulevard	Victoria Street	City of Carson	Weekday
9.	Avalon Boulevard	184th Street-StubHub Center Gate	City of Carson	Weekday
10.	Avalon Boulevard	University Drive	City of Carson	Weekday
11.	Avalon Boulevard	Martin Luther King, Jr Street	City of Carson	Weekday/Saturday
12.	Avalon Boulevard	Elsmere Drive	City of Carson	Weekday/Saturday
13.	Avalon Boulevard	Turmont Street	City of Carson	Weekday/Saturday
14.	Avalon Boulevard	Del Amo Boulevard	City of Carson	Weekday/Saturday
15.	Avalon Boulevard	I-405 NB Ramps	City of Carson/Caltrans	Weekday/Saturday
16.	Avalon Boulevard	I-405 SB Ramps	City of Carson/Caltrans	Weekday/Saturday
17.	Main Street	SR-91 WB Ramps	City of Carson/Caltrans	Weekday/Saturday
18.	Main Street	Albertoni Street	City of Carson	Weekday/Saturday
19.	Main Street	Victoria Street	City of Carson	Weekday
20.	Figueroa Street	Victoria Street	City of Carson/City of Los Angeles	Weekday
21.	I-110 NB On-Ramp	190th Street	City of Los Angeles/Caltrans	Weekday/Saturday
22.	I-110 SB Off-Ramp	190st Street	City of Los Angeles/Caltrans	Weekday/Saturday
23.	Central Avenue	Victoria Street	City of Carson	Weekday
24.	Hamilton Avenue	Del Amo Boulevard	County of Los Angeles	Weekday
25 [a].	Hamilton Avenue	110 SB Ramps	County of Los Angeles/Caltrans	Weekday
26.	Figueroa Street	Del Amo Boulevard	City of Carson	Weekday
27.	Figueroa Street	110 NB Ramps	City of Carson/Caltrans	Weekday
28.	SR-91 EB Ramps	Albertoni Street	City of Carson/Caltrans	Weekday/Saturday
29. [a]	Main Street	Broadway	City of Carson	Weekday
30. [b]	New Driveway	Martin Luther King, Jr Street	City of Carson	Weekday/Saturday
31. [b]	Avalon Boulevard	New Driveway	City of Carson	Weekday/Saturday

Notes:
[a] Unsignalized intersection
[b] Future intersection

TABLE 2
LEVEL OF SERVICE DEFINITIONS FOR INTERSECTIONS

Level of Service	V/C Ratio	Delay (Unsignalized Intersections) [a]	Definition
A	0.000 - 0.600	≤ 10	EXCELLENT. No vehicle waits longer than one red light and no approach phase is fully used.
B	0.601 - 0.700	> 10 and ≤ 15	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
C	0.701 - 0.800	> 15 and ≤ 25	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	0.801 - 0.900	> 25 and ≤ 35	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	0.901 - 1.000	> 35 and ≤ 50	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	> 1.000	> 50	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.

Notes:

Source: *Transportation Research Circular No. 212, Interim Materials on Highway Capacity* (Transportation Research Board, 1980) and *Highway Capacity Manual, 6th Edition, A Guide for Multimodal Mobility Analysis* (Transportation Research Board, 2016).

[a] Measured in seconds.

Chapter 2
Existing Conditions

A comprehensive data collection effort was undertaken to develop a detailed description of existing conditions in the Project Study Area. Within this Study Area, the Existing Conditions analysis includes an assessment of the existing street system, an analysis of traffic volumes and current operating conditions, and an assessment of the existing public transit service, as well as pedestrian and bicycle circulation at the time of the NOP issuance.

STUDY AREA

As mentioned, the Project site is bounded by Martin Luther King, Jr. Street to the north, Avalon Boulevard to the east, and The Creek and the remaining portion of the Victoria Golf Course to the south and west. The Study Area is shown in Figure 2.

A traffic analysis study area generally comprises those intersections with the greatest potential to experience significant traffic impacts due to the Project, including intersections that are:

1. Immediately adjacent or in close proximity to the project site
2. In the vicinity of the project site that are documented to have current or projected future adverse operational issues
3. In the vicinity of the project site that are forecast to experience a relatively greater percentage of project-related vehicular turning movements (e.g., at freeway ramp intersections)

The Project Study Area was established in consultation with the County, the City of Carson, and Caltrans, based on the above criteria, as well as peak hour Project trip generation, the anticipated distribution of Project traffic, and the existing intersections/corridor operations. It comprises those intersections with the reasonable potential to experience significant traffic impacts due to the Project.

A total of 29 existing intersections were identified during the MOU process for detailed analysis of the above conditions. In addition, the Project proposes to add a new intersection on Martin Luther King, Jr. Street. An additional intersection on Avalon Boulevard, between Elsmere Drive and Turmont Avenue, has been proposed to be developed by The Creek, resulting in a total of 31 study intersections. Figure 2 illustrates the location of the Project site in relation to the surrounding street system and the 31 study intersections. The existing lane configurations at the analyzed intersections are provided in Appendix B.

EXISTING STREET SYSTEM

The existing street system in the Study Area consists of a regional roadway system including freeways, primary and secondary arterials, and collector and local streets that provide regional, sub-regional, or local access and circulation within the Study Area. These transportation facilities generally provide two to six travel lanes and usually allow parking on both sides of the street. Typically, the speed limits range between 25 and 35 miles per hour (mph) on the streets and between 55 and 65 mph on freeways.

Street classifications are designated in *City of Carson General Plan* (City of Carson, 2004) (General Plan) for City of Carson streets and in *Mobility Plan 2035, An Element of the General Plan* (Los Angeles Department of City Planning, January 2016) (the Mobility Plan) for City of Los Angeles streets.

The facilities in the Study Area located within the City of Carson are defined by the following in the General Plan:

- State Highways and Freeways are controlled access, high-speed roadways with grade-separated interchanges intended to expedite movement between distant areas in the region. Planning, design, construction and maintenance of freeways in California are the responsibility of Caltrans.

  Major Highways function to connect traffic from collectors to the major freeway systems as well as to provide access to adjacent land uses. They move large volumes of automobiles, trucks and buses, and link principal elements within the City of Carson to other adjacent regions. These facilities typically handle inter-city vehicular trips in the magnitude of 25,000 or more vehicles per day. Typically, curb parking is prohibited during peak periods. Raised medians to separate opposing flows are typical and access

control (i.e., driveways and minor intersecting streets) is often minimized. Separate left-turn lanes at major signalized intersections are required, with double left-turn lanes often provided. Separate right-turn lanes, which may also serve as bus loading areas, are provided at locations where warranted by high-turn volumes. Major highways in the City of Carson require rights-of-way of 100 feet or more.

- Secondary Highways are similar to major highways in function. They connect traffic from collectors to the major freeway system. They move large volumes of automobiles, trucks and buses, and link principal elements within the City of Carson to other adjacent regions. These streets also handle intra-city trips in other adjacent regions. These roadways carry approximately 10,000 to 25,000 vehicles per day. Four to six through lanes are provided along with single or double left-turn lanes at major signalized intersections. Curb parking is often prohibited during peak periods. Secondary highways require a minimum right-of-way of 80 feet.

- Collector Streets are intended to serve as an intermediate route to handle traffic between local streets and arterials. In addition, collector streets provide access to abutting property. Collector streets are anticipated to carry traffic volumes between 2,000 to 5,000 vehicles per day, but some carry as many as 10,000 vehicles per day. A collector street may have one or two through lanes in each direction and curb parking is often provided. The primary function of the collector street is to collect vehicles from the local street system and transport them to the arterial system as efficiently as possible. Collector streets require a minimum right-of-way width of 60 feet.

- Local Streets principally provide vehicular, pedestrian, and bicycle access to property abutting the public right-of-way. Cross sections of local streets vary, depending on the abutting land uses, parking requirements, street trees, and other considerations. Where both sides of the street are served equally in residential areas, the common right-of-way width for a local street is 48-60 feet, with a 36-40-foot pavement width. In multi-family areas, where there is significant parking demand throughout the day, a minimum of 40 feet of pavement may be required, to provide two moving lanes of traffic in addition to street parking on both sides. In commercial and industrial areas, a minimum pavement width of 40 feet is necessary. In industrial areas, consideration of the predominant type of trucking, and whether or not maneuvering of trailers must be provided, may require a pavement width of 44 feet or more. Local streets can be expected to carry less than 1,500 vehicles per day. All other streets in the City of Carson not otherwise classified are local streets.

The facilities in the Study Area located within the City of Los Angeles are defined by the following in the Mobility Plan:

- Freeways are high-volume, high-speed roadways with limited access provided by interchanges that carry regional traffic through and do not provide local access to adjacent land uses.

- Arterial Streets are major streets that serve through traffic, as well as provide access to major commercial activity centers. Arterials are divided into two categories:

- Boulevards represent the widest streets that typically provide regional access to major destinations and include two categories:
    - Boulevard I provides up to four travel lanes in each direction with a target operating speed of 40 mph
    - Boulevard II provides up to three travel lanes in each direction with a target operating speed of 35 mph
- Avenues pass through both residential and commercial areas and include three categories:
    - Avenue I provides up to two travel lanes in each direction with a target operating speed of 35 mph
    - Avenue II provides up to two travel lanes in each direction with a target operating speed of 30 mph
    - Avenue III provides up to two travel lanes in each direction with a target operating speed of 25 mph

- Collector Streets are generally located in residential neighborhoods and provide access to and from arterial streets for local traffic and are not intended for cut-through traffic. They provide one travel lane in each direction with operating speed of 25 mph.
- Local Streets are intended to accommodate lower volumes of vehicle traffic and provide parking on both sides of the street. They provide one travel lane in each direction with a target operating speed of 15 to 20 mph. Local streets include two categories:
    - Continuous local streets connect to other streets at both ends
    - Non-continuous local streets lead to a dead-end

Primary regional access to the Project site is provided by I-110, I-405 and SR 91. The major arterials providing regional and sub-regional access to the Project vicinity include Avalon Boulevard and Del Amo Boulevard. The following is a brief description of the major roadways in the Study Area:

Freeways

- I-405 – I-405 generally runs in the southeast-northwest direction and is located 0.3 miles southwest of the Project site. In the vicinity of the Study Area, I-405 generally provides five general purpose lanes and one carpool lane in each direction. Access to and from I-405 is available via interchanges at Avalon Boulevard, Main Street, 190th Street, and Vermont Avenue.

- I-110 – I-110 generally runs in the north-south direction and is located 0.75 miles west of the Project site. In the vicinity of the Study Area, I-110 generally provides four lanes in each direction. Access to and from I-10 is available via interchanges at Hamilton Avenue, Figueroa Street, and 190th Street.

- SR 91 – SR 91 generally runs in the east-west direction and is located 1.3 miles north of the Project site. In the vicinity of the Study Area, SR 91 generally provides four lanes in each direction and an eastbound carpool lane. Access to and from SR 91 is available via interchanges at Vermont Avenue, Main Street, Albertoni Street, and Avalon Boulevard.

Roadways

- Figueroa Street – Figueroa Street is a designated Major Highway in the General Plan south of 190th Street and a designated Avenue I in the Mobility Plan north of 190th Street. The street runs in the north-south direction and is located west of the Project site. It generally provides four lanes, two in each direction, with left-turn lanes at intersections. No on-street parking is available within the Study Area. Inside lane width is generally 10 feet and the total paved width is generally 80 feet.

- Main Street – Main Street is a designated Major Highway in the General Plan and runs in the north-south direction. It is located west of the Project site and generally provides four lanes, two in each direction, with left-turn lanes at intersections. Some unmetered parking is available within the Study Area. Inside lane width is generally 10 feet and the total paved width is generally 84 feet.

- Avalon Boulevard – Avalon Boulevard is a designated Major Highway in the General Plan and runs in the north-south direction. It is located adjacent to the eastern boundary of the Project site and provides access to the Project site. The street generally provides six lanes, three in each direction, with left-turn lanes at intersections. No on-street parking is available within the Study Area. Inside lane width is generally 10 feet and the total paved width is generally 128 feet.

- 182nd Street – 182nd Street is a designated Avenue II in the Mobility Plan and runs in the east-west direction. It is located north of the Project site and generally provides four lanes, two in each direction, with a left-turn median. Some unmetered on-street parking is available on the south side of the street within the Study Area. Inside lane width is generally 10 feet and the total paved width is generally 60 feet.

- Albertoni Street – Albertoni Street is a designated Secondary Highway in the General Plan and runs in the east-west direction. It is located north of the Project site and generally provides four to five lanes, two in each direction with a third eastbound lane east of Main Street and a left-turn median. On-street parking is generally available on both sides of the street within the Study Area. Inside lane width is generally 10 feet and the total paved width is generally 84 feet.

- Victoria Street – Victoria Street is a designated Major Highway in the General Plan and runs in the east-west direction. It is located north of the Project site and generally provides four lanes, two in each direction, and left-turn lanes at intersections. No on-street parking

is available within the Study Area. Inside lane width is generally 10 feet and the total paved width is generally 84 feet.

- 190th Street – 190th Street is a designated Boulevard II in the Mobility Plan and runs in the east-west direction. It is located northwest of the Project site and generally provides four to five lanes, two in each direction with a third lane west of I-110 and a left-turn median. Some unmetered on-street parking is available on the south side of the street within the Study Area. Inside lane width is generally 10 feet and the total paved width is generally 60 feet.

- 184th Street – 184th Street is a local street in the General Plan and runs in the east-west direction. It is located north of the Project site and generally provides two lanes, one in each direction. It also serves as the main entrance to the StubHub Center. Unmetered on-street parking is generally available within the Study Area. Lane width is generally 12 feet and the total paved width is generally 36 feet.

- University Drive – University Drive is a designated Secondary Highway in the General Plan and runs in the east-west direction. It is located north of the Project site and generally provides four lanes, two in each direction, and a left-turn median. No on-street parking is available within the Study Area. Inside lane width is generally 10 feet and the total paved width is generally 80 feet.

- Martin Luther King, Jr. Street – Martin Luther King, Jr. Street is a designated Collector street in the General Plan and runs in the east-west direction. It is located adjacent to the northern boundary of the Project Site and provides access to the Project site. The street generally provides two lanes, one in each direction, and a left-turn median. Unmetered on-street parking is generally available on both sides of the street within the Study Area. Lane width is generally 12 feet and the total paved width is generally 60 feet.

- Elsmere Drive – Elsmere Drive is a local street in the General Plan and runs in the east-west direction. It is located east of the Project site and serves as one of the entrances to the Project Site. Two lanes are generally provided in each direction and unmetered on-street parking is available on both sides of the street within the Study Area. Lane width is generally 12 feet and the total paved width is generally 36 feet.

- Del Amo Boulevard – Del Amo Boulevard is a designated Major Highway in the General Plan and runs in the east-west direction. It is located south of the Project site and generally provides four to six lanes, two to three in each direction, and left-turn lanes at intersections. No on-street parking is available within the Study Area. Inside lane width is generally 10 feet and the total paved width is generally 86 feet.

- Torrance Boulevard – Torrance Boulevard is a designated Major Highway in the General Plan and runs in the east-west direction. It is located south of the Project site and generally provides four lanes, two in each direction, and a left-turn median. Unmetered on-street parking is generally available on the north side of the street within the Study Area. Inside lane width is generally 10 feet and the total paved width is generally 64 feet.

The existing lane configurations at the analyzed intersections are provided in Appendix B.

EXISTING TRANSIT SYSTEM

The Project area is served by bus lines operated by Metro, Long Beach Transit, Torrance Transit, and Carson Circuit. Figure 3 illustrates the existing transit service in the Study Area.

Table 3 summarizes the transit lines operating in and around the Study Area, including the type of service (peak vs. off-peak, express vs. local), frequency of service, service area, and hours of operation. The average frequency of transit service during the peak hour was derived from the number of peak period stops made at the stop nearest the Project site.

Transit ridership statistics provided by Metro was used, along with the frequency of service for each line and maximum seated and standing capacity of each bus, to determine the residual transit capacity of routes serving the Project site. Tables 4A and 4B summarize the total residual capacity of the transit lines within 0.25 miles walking distance of the Project site during the morning and afternoon peak hours, respectively. As shown, the transit lines serving the Project site currently have available capacity for 301 additional riders during the morning peak hour and 202 additional riders during the afternoon peak hour. No data was readily available for the Carson Circuit or Torrance Transit, so no capacity was assumed for those lines. The transit lines with bus stops or stations located more than 0.25 miles from the Project site were not included.

BICYCLE AND PEDESTRIAN NETWORK

Existing Bicycle System

Based on *Carson Master Plan of Bikeways* (City of Carson, 2013) for City of Carson streets and *2010 Bicycle Plan* (Los Angeles Department of City Planning, 2010) for City of Los Angeles streets, the existing bicycle system in the Study Area consists of a limited coverage of bicycle paths (Class I), bicycle lanes (Class II), and bicycle routes (Class III). Bicycle lanes are a component of street design with dedicated striping, separating vehicular traffic from bicycle traffic. These facilities offer a safer environment for both cyclists and motorists. Bicycle routes are identified as bicycle-friendly streets where motorists and cyclists share the roadway and there is no dedicated striping of a bicycle lane. Bicycle routes are preferably located on collector

and lower volume arterial streets. Bicycle lanes are provided along Avalon Boulevard, Del Amo Boulevard and University Drive and a bicycle route is designated along Turmont Street.

Existing Pedestrian Facilities

The walkability of existing facilities is based on the availability of pedestrian routes necessary to accomplish daily tasks without the use of an automobile; these attributes are quantified by WalkScore.com and assigned a score out of 100 points. With the various commercial businesses adjacent to residential neighborhoods, the walkability of the Study Area is approximately 52 points[5]. This compares to a City of Carson average of 53 points.

The existing sidewalks that serve as routes to the Project site provide proper connectivity to pedestrian crossings at intersections within the Study Area and adequate widths for a comfortable and safe pedestrian environment. There currently is no sidewalk on the south side of Martin Luther King, Jr. Street adjacent to the northern boundary of the Project site.

The signalized intersections adjacent to the Project site provide pedestrian phasing, crosswalk striping, and Americans with Disabilities Act wheelchair ramps. The pedestrian crossing at the intersection of Elsmere Drive & Avalon Boulevard provides connectivity between the adjacent neighborhood and the Project site.

VISION ZERO

As described in *Vision Zero: Eliminating Traffic Deaths in Los Angeles by 2025* (City of Los Angeles, August 2015), Vision Zero is a traffic safety policy that promotes strategies to eliminate collisions that result in severe injury or death in the City of Los Angeles. Vision Zero has identified the High Injury Network, a network of streets based on the collision data from the last five years, where strategic investments will have the biggest impact in reducing death and

[5] WalkScore.com rates the Project site (340 Martin Luther King, Jr. Street) with a score of 52 of 100 possible points (scores accessed on August 14, 2018). WalkScore calculates the walkability of specific addresses by taking into account the ease of living in the neighborhood with a reduced reliance on automobile travel.

severe injury. Vision Zero has not identified any streets within the Study Area as part of the High Injury Network.

EXISTING TRAFFIC VOLUMES AND LEVELS OF SERVICE

This section presents the existing peak hour turning movement traffic volumes for the intersections analyzed in the study, describes the methodology used to assess the traffic conditions at each intersection, and analyzes the resulting operating conditions at each intersection indicating V/C ratios or delay and LOS.

Existing Traffic Volumes

Intersection turning movement counts were conducted in 2018 at the 29 existing study intersections during the weekday morning (7:00 AM to 10:00 AM) and afternoon peak period (3:00 PM to 6:00 PM). The Saturday turning movement counts represent the midday (12:00 PM to 2:00 PM) period. These mid-day volumes were derived from two sources: newly collected traffic volumes during the mid-day period and volumes adjusted from the weekday afternoon peak period[6].

These volumes are shown in Figures 4A and 4B, respectively. Intersection lane configurations are shown in Appendix B. Intersection turning movement count sheets are provided in Appendix C.

Existing Unsignalized Intersection Analysis

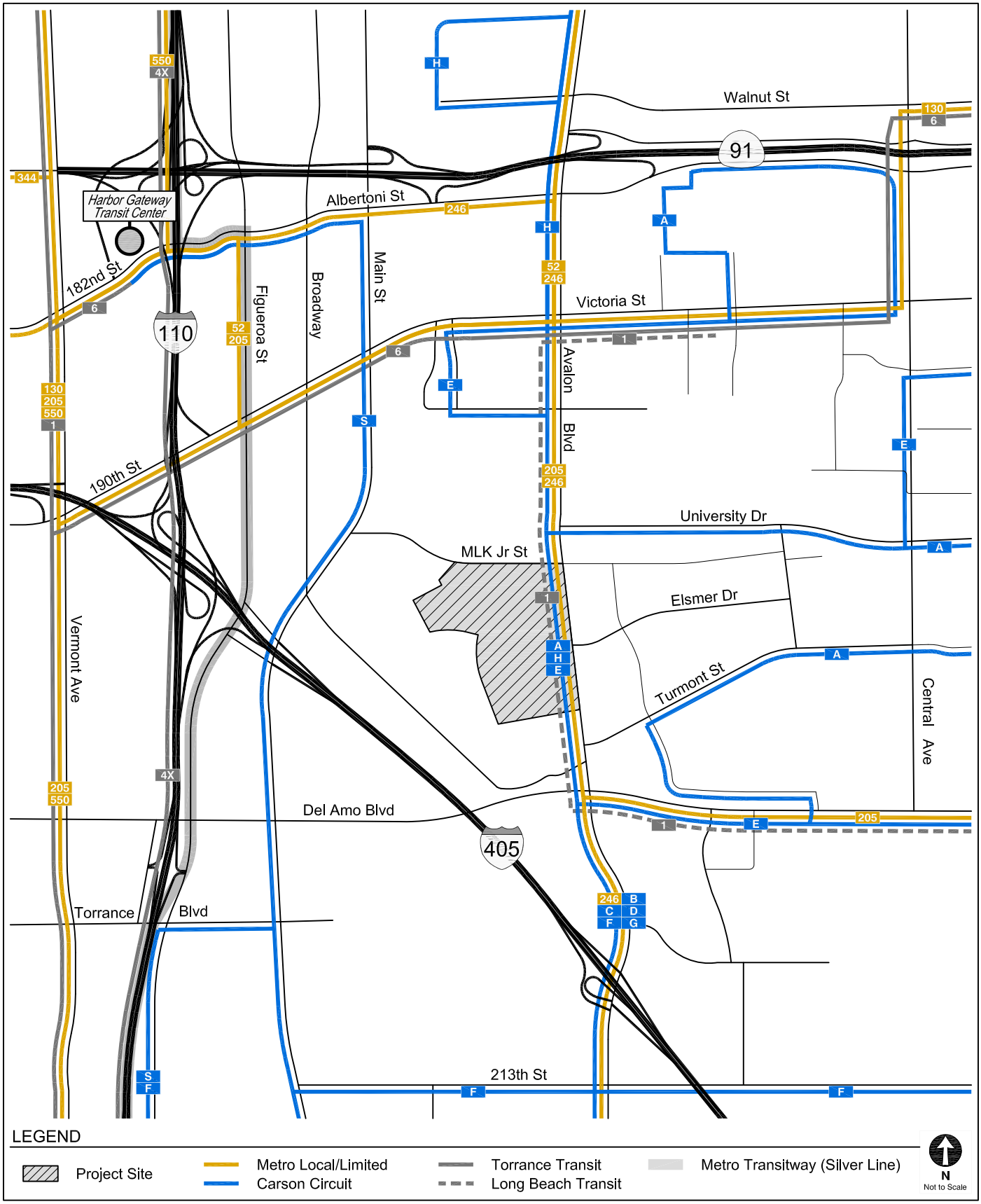
A signal warrant analysis was performed for the two unsignalized intersections. As detailed in Chapter 6, one of the two unsignalized intersections, Hamilton Avenue & I-110 Southbound Ramps (Intersection #25) met signal warrant criteria under the existing traffic conditions.

[6] Counts at a total of nine intersections were collected during both the weekday afternoon and Saturday mid-day peak periods. An overall adjustment factor was developed from a comparison of the weekday and Saturday traffic volumes. This adjustment factor was then applied to the weekday afternoon traffic volumes at the six intersections identified for Saturday analysis that did not have Saturday traffic counts.

Existing Intersection Levels of Service

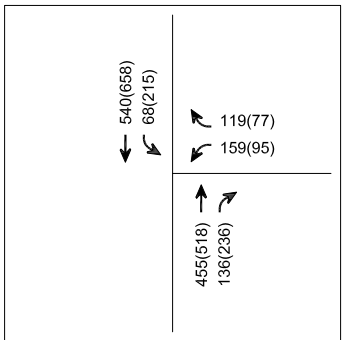
The existing (year 2018) weekday morning and afternoon peak hour turning movements presented in Figures 4A and 4B were used in conjunction with the LOS methodology described above to determine existing (year 2018) operating conditions at each of the study intersections. Tables 5A and 5B summarize the weekday morning, weekday afternoon and Saturday midday peak hour V/C ratio and corresponding LOS at each study intersection under Existing Conditions. The results of this analysis indicate that 28 of the 29 study intersections are currently operating at LOS D or better during the weekday morning and afternoon peak hours, as shown in Table 5A. The unsignalized intersection at Hamilton Avenue & I-110 Southbound Ramps (Intersection #25) operates at LOS E during the morning peak hour and LOS F during the afternoon peak hour. Under existing weekend conditions, as shown in Table 5B, all 15 existing study intersections are currently operating at LOS A or LOS B during the weekend mid-day peak hour.

LOS calculation worksheets are provided in Appendix D.

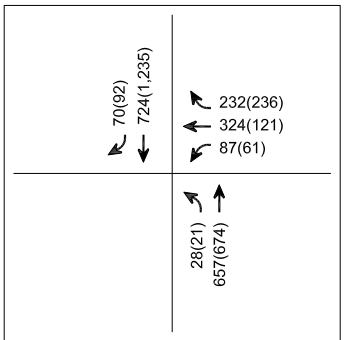


EXISTING TRANSIT SERVICE

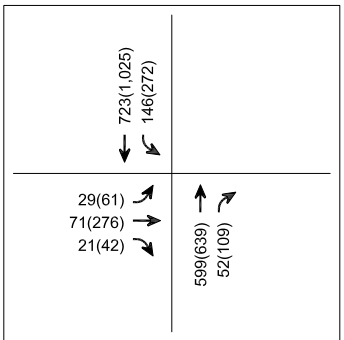
FIGURE 3



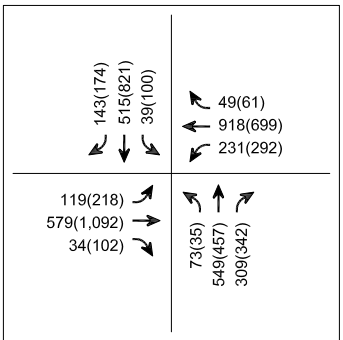
1. Main Street & MLK Jr Street



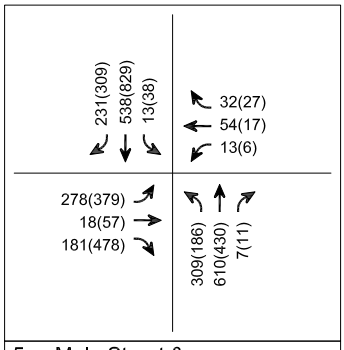
2. Main Street & I-405 NB Off-Ramp



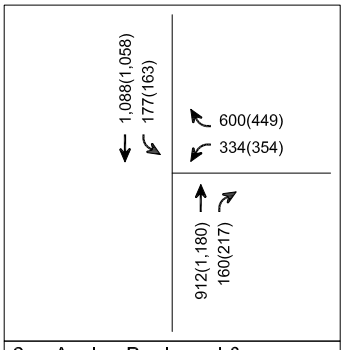
3. Main Street & I-405 SB On-Ramp



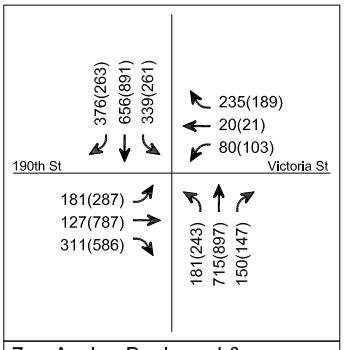
4. Main Street & Del Amo Boulevard



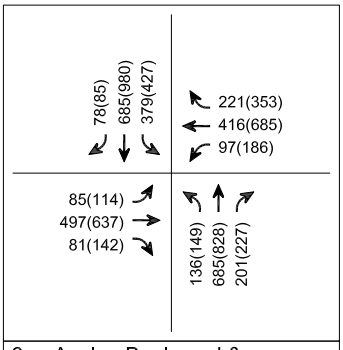
5. Main Street & Torrance Boulevard



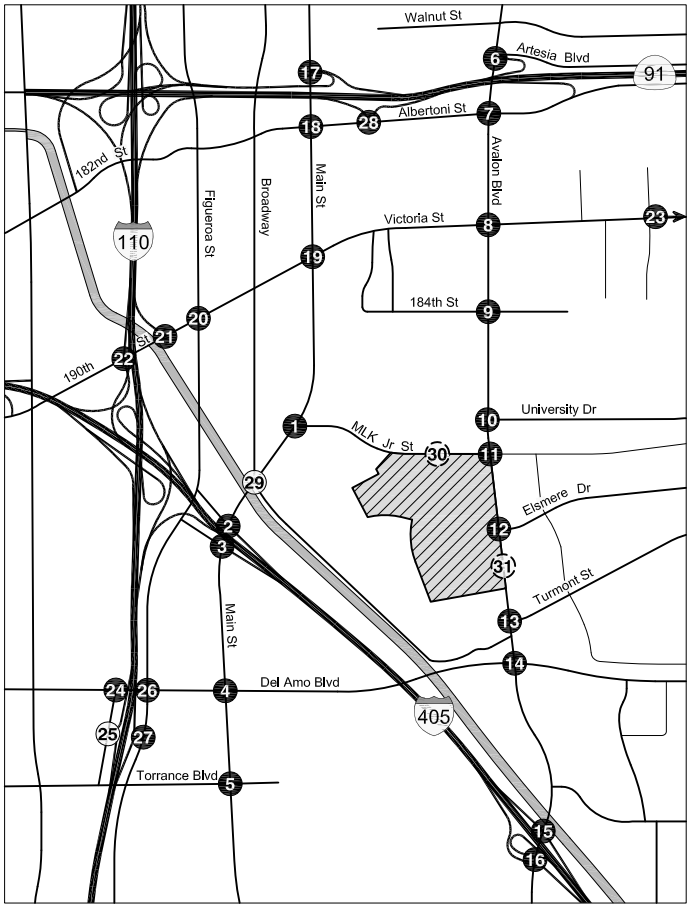
6. Avalon Boulevard & SR-91 WB On-Ramp

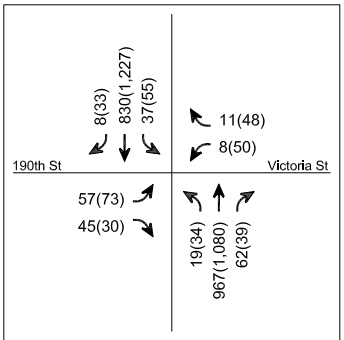


7. Avalon Boulevard & Albertoni Street

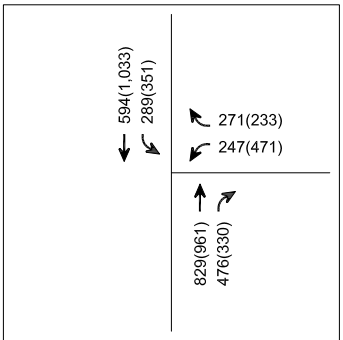


8. Avalon Boulevard & Victoria Street





9. Avalon Boulevard & 184th St / StubHub Center



10. Avalon Boulevard & University Drive

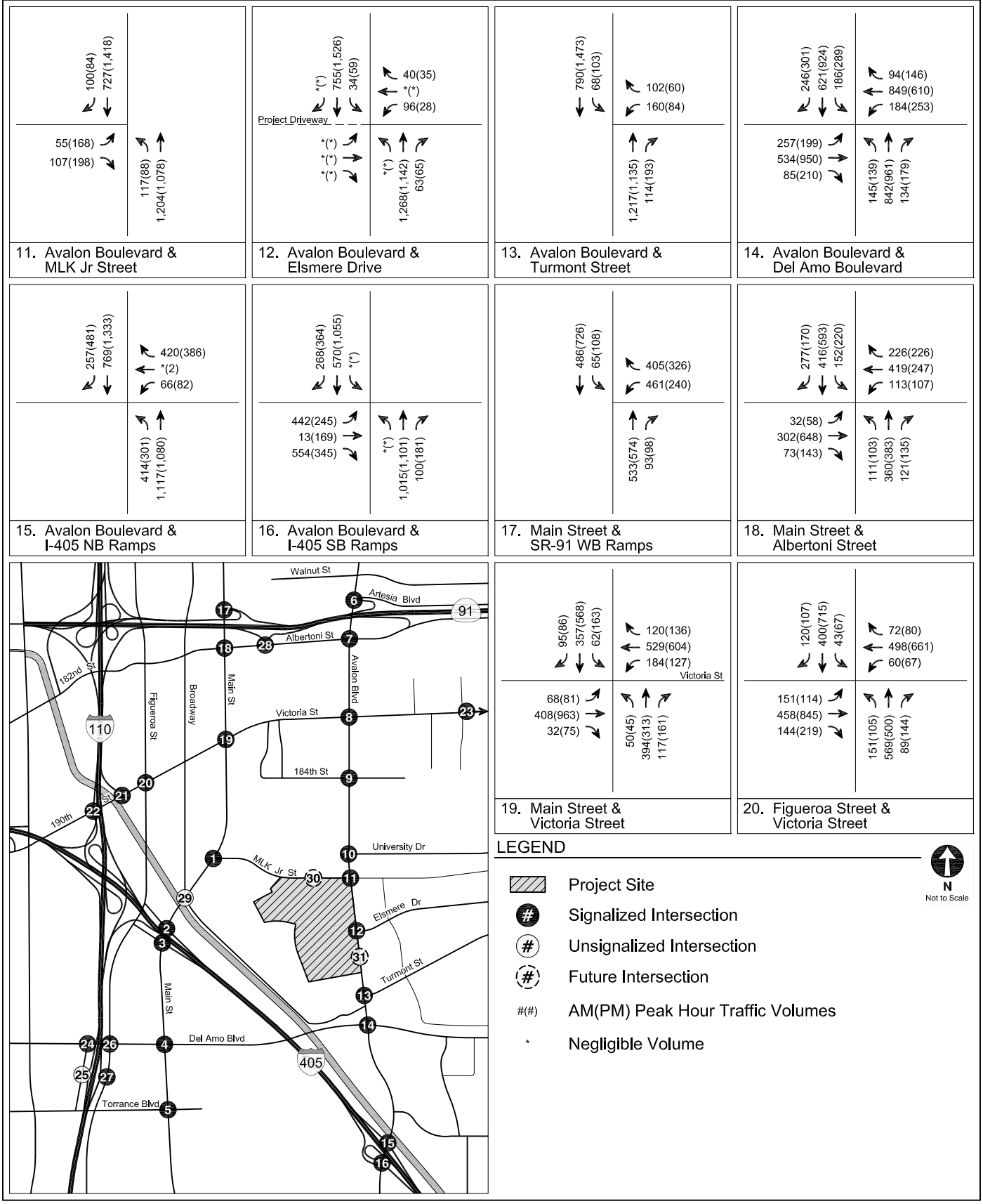
LEGEND

- Project Site
- # Signalized Intersection
- # Unsignalized Intersection
- # Future Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes
- * Negligible Volume

N
Not to Scale

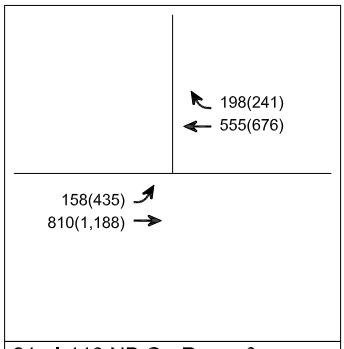
EXISTING CONDITIONS (YEAR 2018)
WEEKDAY PEAK HOUR TRAFFIC VOLUMES

FIGURE 4A

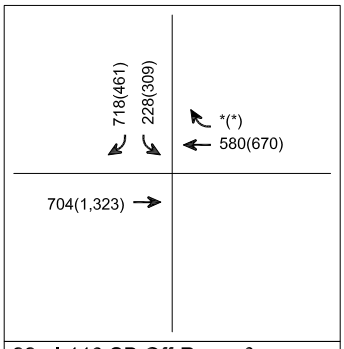


EXISTING CONDITIONS (YEAR 2018)
WEEKDAY PEAK HOUR TRAFFIC VOLUMES

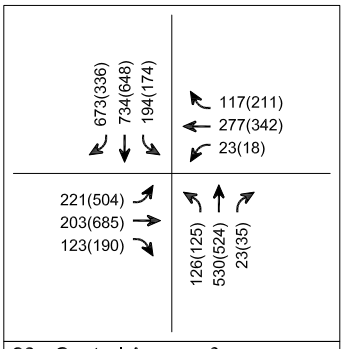
FIGURE
4A (CONT.)



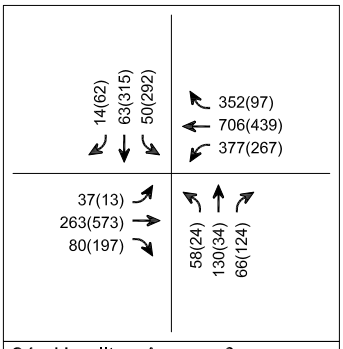
21. I-110 NB On-Ramp & 190th Street



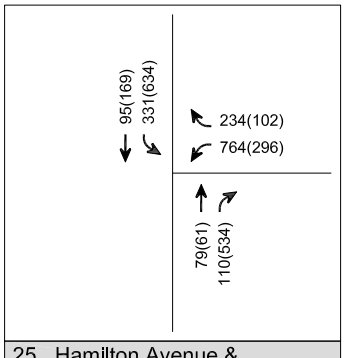
22. I-110 SB Off-Ramp & 190th Street



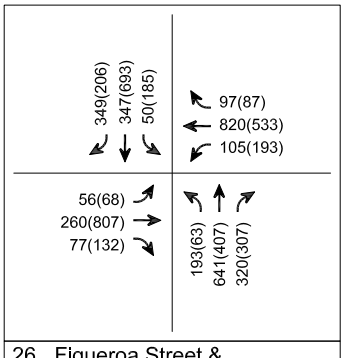
23. Central Avenue & Victoria Street



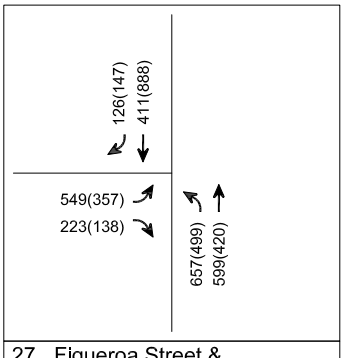
24. Hamilton Avenue & Del Amo Boulevard



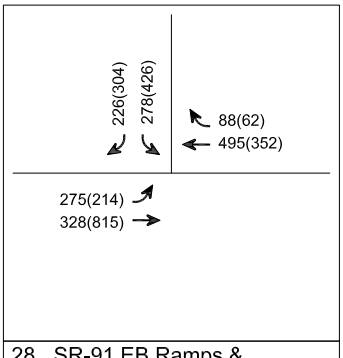
25. Hamilton Avenue & I-110 SB Ramps



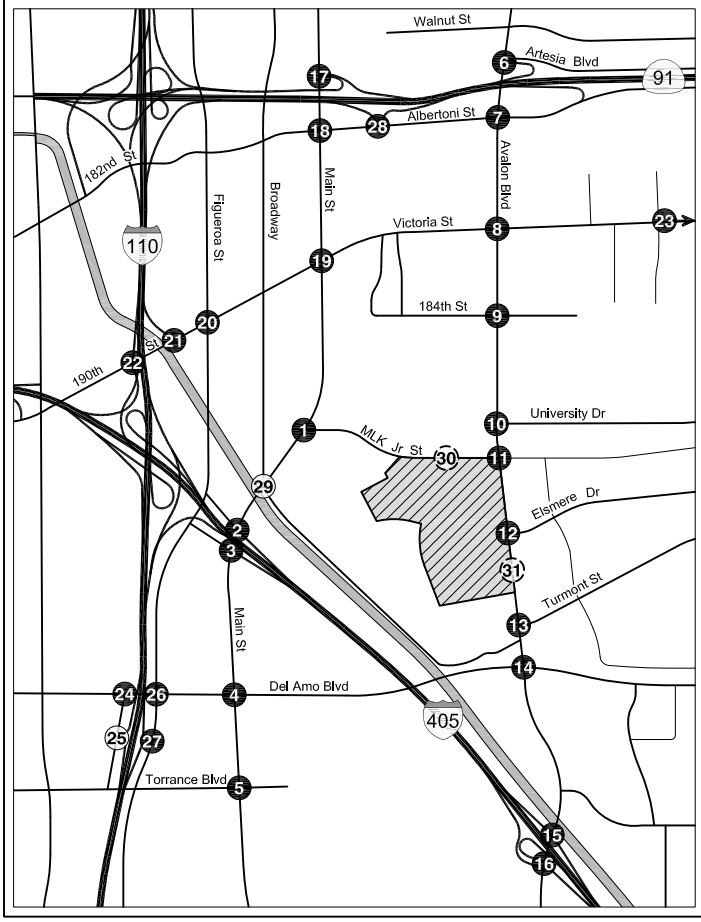
26. Figueroa Street & Del Amo Boulevard

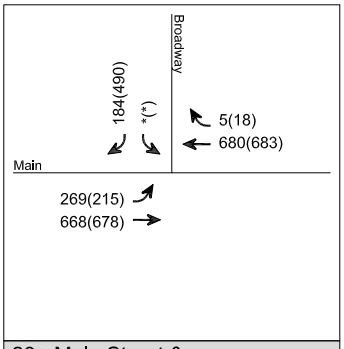


27. Figueroa Street & I-110 NB Ramps



28. SR-91 EB Ramps & Albertoni Street





29. Main Street & Broadway

Future Intersection

30. New Driveway & Martin Luther King Jr Street

N
Not to Scale

LEGEND

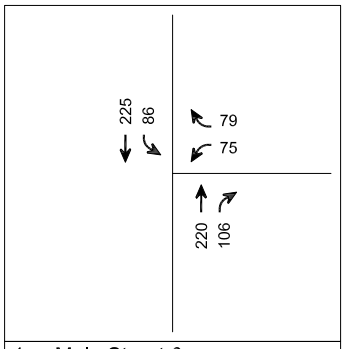
- Project Site
- Signalized Intersection
- Unsignalized Intersection
- Future Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes
- * Negligible Volume

Future Intersection

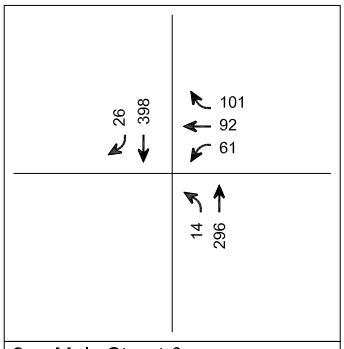
31. Avalon Boulevard & New Driveway

EXISTING CONDITIONS (YEAR 2018)
WEEKDAY PEAK HOUR TRAFFIC VOLUMES

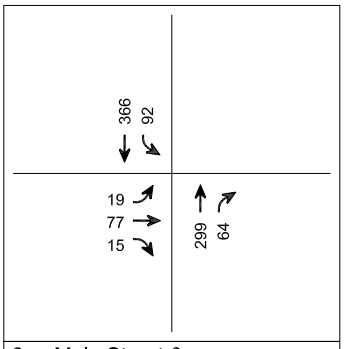
FIGURE 4A (CONT.)



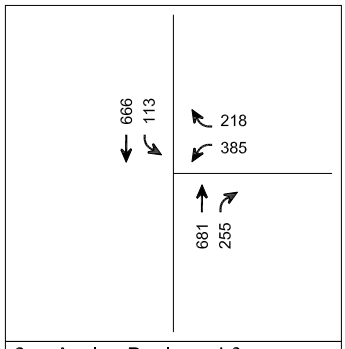
1. Main Street & MLK Jr Street



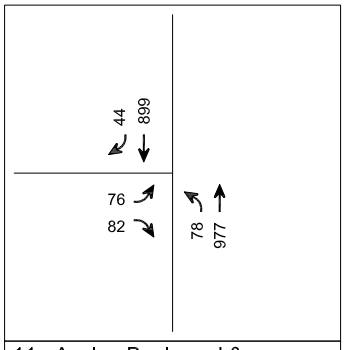
2. Main Street & I-405 NB Off-Ramp



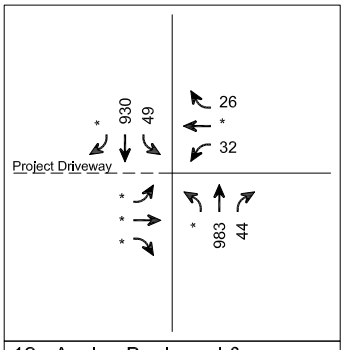
3. Main Street & I-405 SB On-Ramp



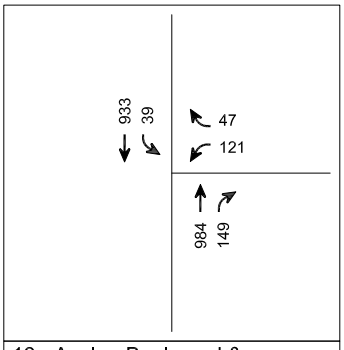
6. Avalon Boulevard & SR-91 WB On-Ramp



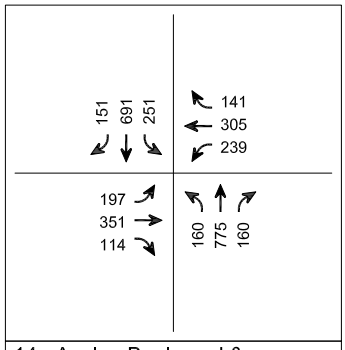
11. Avalon Boulevard & MLK Jr Street



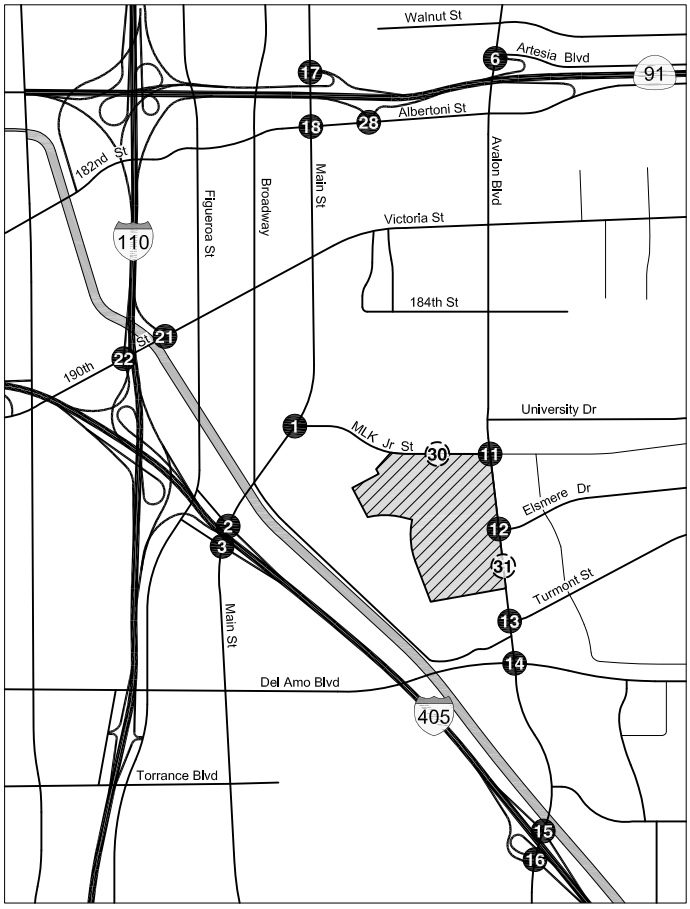
12. Avalon Boulevard & Elsmere Drive

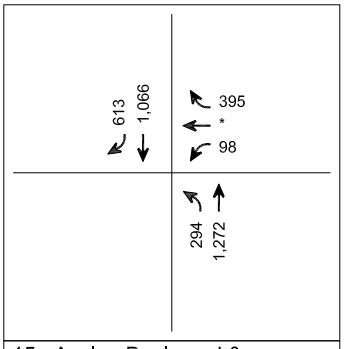


13. Avalon Boulevard & Turmont Street

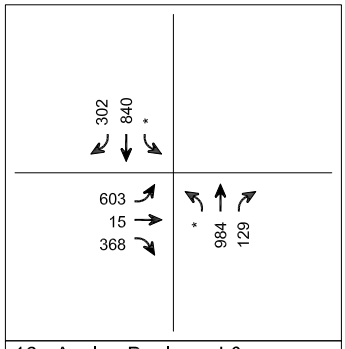


14. Avalon Boulevard & Del Amo Boulevard





15. Avalon Boulevard & I-405 NB Ramps



16. Avalon Boulevard & I-405 SB Ramps

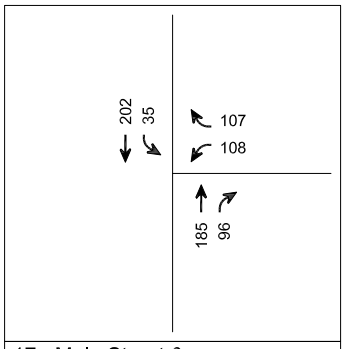
LEGEND

- Project Site
- Signalized Intersection
- Unsignalized Intersection
- Future Intersection
- # Midday Peak Hour Traffic Volume
- * Negligible Volume

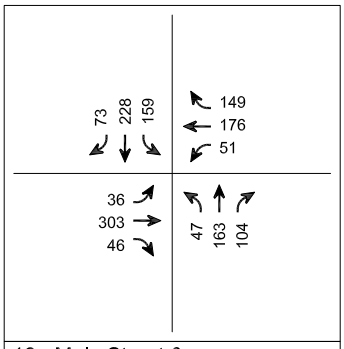
N
Not to Scale

EXISTING CONDITIONS (YEAR 2018)
SATURDAY PEAK HOUR TRAFFIC VOLUMES

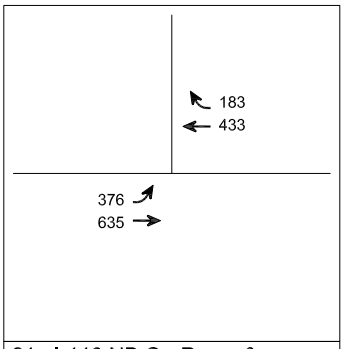
FIGURE 4B



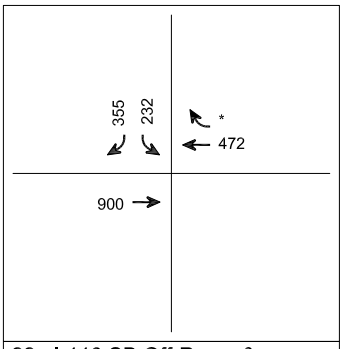
17. Main Street & SR-91 WB Ramps



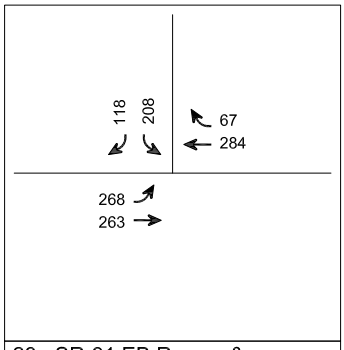
18. Main Street & Albertoni Street



21. I-110 NB On-Ramp & 190th Street



22. I-110 SB Off-Ramp & 190th Street



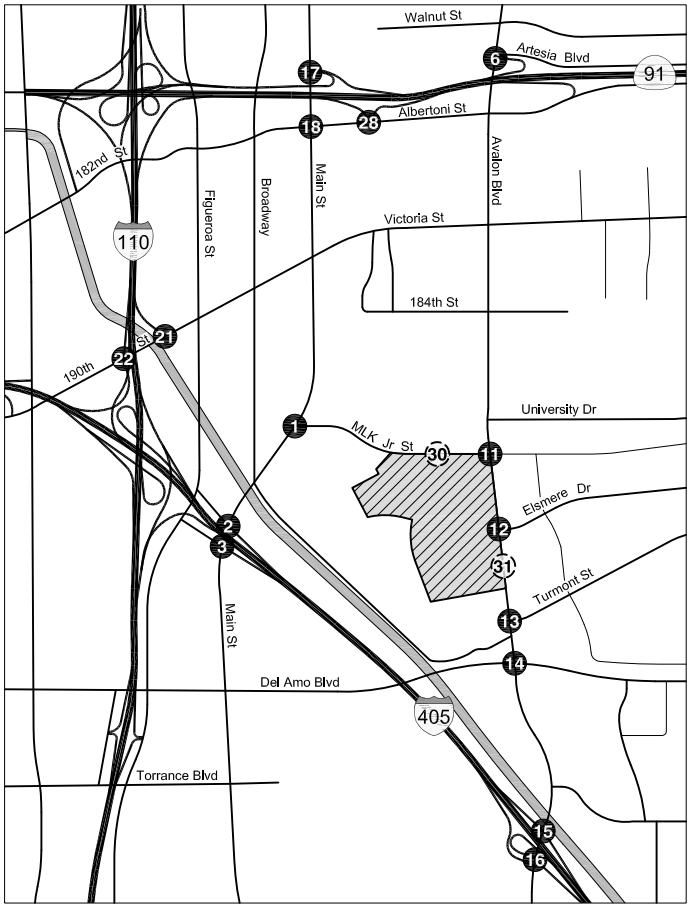
28. SR-91 EB Ramps & Albertoni Street

Future Intersection

30. New Driveway & Martin Luther King Jr Street

Future Intersection

31. Avalon Boulevard & New Driveway



LEGEND

- Project Site
- Signalized Intersection
- Unsignalized Intersection
- Future Intersection
- # Midday Peak Hour Traffic Volume
- * Negligible Volume

N
Not to Scale

EXISTING CONDITIONS (YEAR 2018)
SATURDAY PEAK HOUR TRAFFIC VOLUMES

FIGURE
4B (CONT.)

TABLE 3
EXISTING TRANSIT SERVICE

Provider, Route, and Service Area		Service Type	Hours of Operation	Average Headway (minutes)			
				Morning Peak Period		Afternoon Peak Period	
Metro				**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**
52	Downtown Los Angeles - Compton via Avalon Boulevard	Local	5:00 A.M. - 10:30 P.M.	20	18	24	24
130	Norwalk - Hermosa Beach via Artesia Boulevard	Local	5:00 A.M. - 9:00 P.M.	40	30	48	48
205	Willowbrook - San Pedro via Vermont Avenue	Local	5:30 A.M. - 11:00 P.M.	34	30	40	45
246	Harbor Gateway - San Pedro via Avalon Boulevard	Local	4:30 A.M. - 2:00 A.M.	27	34	30	30
344	Rancho Palos Verdes - Carson via Artesia Boulevard	Local	5:00 A.M. - 9:30 P.M.	40	24	24	40
550	San Pedro - Exposition Park via Vermont Avenue	Express	5:00 A.M. - 11:00 P.M.	34	34	34	34
Carson Circuit				**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**
A	South Bay Pavilion - Cal State Dominguez Hills via Avalon Boulevard	Local	5:20 A.M. - 6:40 P.M.	40	N/A	40	N/A
B	South Bay Pavilion - Moneta via Main Street	Local	5:20 A.M. - 6:40 P.M.	40	N/A	40	N/A
C	South Bay Pavilion - Civic Center via Avalon Boulevard	Local	5:20 A.M. - 6:40 P.M.	40	N/A	40	N/A
D	South Bay Pavilion - Metro Blue Line Del Amo Station via Del Amo Boulevard	Local	5:20 A.M. - 6:40 P.M.	40	N/A	40	N/A
E	South Bay Pavilion - Del Amo/Wilmington via Avalon Boulevard	Local	5:20 A.M. - 6:40 P.M.	40	N/A	40	N/A
F	South Bay Pavilion - Civic Center via 223rd Street	Local	5:20 A.M. - 6:40 P.M.	40	N/A	40	N/A
G	South Bay Pavilion - Metro Blue Line Del Amo Station via Del Amo Boulevard	Local	5:20 A.M. - 6:40 P.M.	N/A	40	N/A	40
H	South Bay Pavilion - Hemmingway Park via Avalon Boulevard	Local	5:20 A.M. - 6:40 P.M.	40	N/A	40	N/A
Torrance Transit				**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**
1	Torrance - Harbor Freeway Station via I-110	Local	5:00 A.M. - 11:00 P.M.	40	27	40	42
4x	Downtown Los Angeles - Torrance via I-110	Express	5:00 A.M. - 8:00 P.M. [a]	40	50	45	42
6	Torrance - Carson - Artesia Station via 190th Street/Victoria Street	Local	5:00 A.M. - 8:30 P.M.	40	40	40	48
Long Beach Transit				**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**
1	Downtown Long Beach - Cal State Dominguez Hills via Del Amo Boulevard	Local	4:30 A.M. - 11:00 P.M.	34	30	30	34
Metro Transitway				**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**
Silver	El-Monte - Downtown Los Angeles - San Pedro via I-110	Rapid	4:30 A.M. - 2:00 A.M.	6	6	6	6

Notes

[a] No midday service
Metro: Los Angeles County Metropolitan Transportation Authority
AM Peak from 6 AM - 10 AM
PM Peak from 3 PM - 7 PM

TABLE 4A
TRANSIT SYSTEM CAPACITY IN STUDY AREA - MORNING PEAK HOUR

Provider, Route, and Service Area		Capacity per Trip [a]	Peak Hour Ridership [b]				Average Remaining Capacity per Trip		Remaining Peak Hour Capacity	
			Peak Load		Average Load					
			NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Metro Bus										
205	Willowbrook - San Pedro via Vermont Avenue	50	13	11	7	7	43	43	75	86
246	Harbor Gateway - San Pedro via Avalon Boulevard	50	23	32	15	15	35	35	79	61
Carson Circuit										
A	South Bay Pavilion - Cal State Dominguez Hills via Avalon Boulevard	30	*Data Not Available*							
B	South Bay Pavilion - Moneta via Main Street	30	*Data Not Available*							
C	South Bay Pavilion - Civic Center via Avalon Boulevard	30	*Data Not Available*							
D	South Bay Pavilion - Metro Blue Line Del Amo Station via Del Amo Boulevard	30	*Data Not Available*							
E	South Bay Pavilion - Del Amo/Wilmington via Avalon Boulevard	30	*Data Not Available*							
F	South Bay Pavilion - Civic Center via 223rd Street	30	*Data Not Available*							
G	South Bay Pavilion - Metro Blue Line Del Amo Station via Del Amo Boulevard	30	*Data Not Available*							
H	South Bay Pavilion - Hemmingway Park via Avalon Boulevard	30	*Data Not Available*							
Long Beach Transit										
1	Downtown Long Beach - Cal State Dominguez Hills via Del Amo Boulevard	50	*Data Not Available*							
								Total Transit Residual Capacity in Peak Hour		**301**

Notes:

Capacity assumptions based on discussions with agencies:
Metro Regular Bus - 40 seated / 50 seated and standing.
Metro Articulated Bus - 66 seated / 75 seated and standing standing.

[a] Number of runs in both directions combined during peak hour.

[b] Ridership information based on data from Metro for October 2017.

TABLE 4B
TRANSIT SYSTEM CAPACITY IN STUDY AREA - AFTERNOON PEAK HOUR

Provider, Route, and Service Area		Capacity per Trip [a]	Peak Hour Ridership [b]				Average Remaining Capacity per Trip		Remaining Peak Hour Capacity	
			Peak Load		Average Load					
			NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Metro Bus										
205	Willowbrook - San Pedro via Vermont Avenue	50	9	11	7	8	43	42	32	42
246	Harbor Gateway - San Pedro via Avalon Boulevard	50	23	30	15	20	35	30	69	59
Carson Circuit										
A	South Bay Pavilion - Cal State Dominguez Hills via Avalon Boulevard	30	*Data Not Available*							
B	South Bay Pavilion - Moneta via Main Street	30	*Data Not Available*							
C	South Bay Pavilion - Civic Center via Avalon Boulevard	30	*Data Not Available*							
D	South Bay Pavilion - Metro Blue Line Del Amo Station via Del Amo Boulevard	30	*Data Not Available*							
E	South Bay Pavilion - Del Amo/Wilmington via Avalon Boulevard	30	*Data Not Available*							
F	South Bay Pavilion - Civic Center via 223rd Street	30	*Data Not Available*							
G	South Bay Pavilion - Metro Blue Line Del Amo Station via Del Amo Boulevard	30	*Data Not Available*							
H	South Bay Pavilion - Hemmingway Park via Avalon Boulevard	30	*Data Not Available*							
Long Beach Transit										
1	Downtown Long Beach - Cal State Dominguez Hills via Del Amo Boulevard	50	*Data Not Available*							
								Total Transit Residual Capacity in Peak Hour		**202**

Notes:

Capacity assumptions based on discussions with agencies:
Metro Regular Bus - 40 seated / 50 seated and standing.
Metro Articulated Bus - 66 seated / 75 seated and standing standing.

[a] Number of runs in both directions combined during peak hour.

[b] Ridership information based on data from Metro for October 2017.

TABLE 5A
EXISTING CONDITIONS (YEAR 2018) - WEEKDAY
INTERSECTION PEAK HOUR LEVELS OF SERVICE

No.	Signalized Intersection	Peak Hour	Existing Conditions (Year 2018)	
			V/C Ratio / Delay	LOS
1.	Main Street & MLK Jr Street	AM	0.415	A
		PM	0.524	A
2.	Main Street & I-405 NB Off-Ramp	AM	0.567	A
		PM	0.675	B
3.	Main Street & I-405 SB On-Ramp	AM	0.452	A
		PM	0.702	C
4.	Main Street & Del Amo Boulevard	AM	0.665	B
		PM	0.864	D
5.	Main Street & Torrance Boulevard	AM	0.622	B
		PM	0.754	C
6.	Avalon Boulevard & SR-91 WB On-Ramp	AM	0.546	A
		PM	0.570	A
7.	Avalon Boulevard & Albertoni Street	AM	0.647	B
		PM	0.843	D
8.	Avalon Boulevard & Victoria Street	AM	0.590	A
		PM	0.736	C
9.	Avalon Boulevard & 184th Street-StubHub Center Gate	AM	0.392	A
		PM	0.469	A
10.	Avalon Boulevard & University Drive	AM	0.667	B
		PM	0.723	C
11.	Avalon Boulevard & MLK Jr Street	AM	0.418	A
		PM	0.592	A
12.	Avalon Boulevard & Elsmere Drive	AM	0.459	A
		PM	0.435	A
13.	Avalon Boulevard & Turmont Street	AM	0.520	A
		PM	0.494	A
14.	Avalon Boulevard & Del Amo Boulevard	AM	0.797	C
		PM	0.897	D
15.	Avalon Boulevard & I-405 NB Ramps	AM	0.470	A
		PM	0.508	A
16.	Avalon Boulevard & I-405 SB Ramps	AM	0.602	B
		PM	0.586	A
17.	Main Street & SR-91 WB Ramps	AM	0.624	B
		PM	0.581	A
18.	Main Street & Albertoni Street	AM	0.688	B
		PM	0.814	D
19.	Main Street & Victoria Street	AM	0.525	A
		PM	0.736	C
20.	Figueroa Street & Victoria Street	AM	0.605	B
		PM	0.692	B
21.	I-110 NB On-Ramp & 190th Street	AM	0.353	A
		PM	0.471	A
22.	I-110 SB Off-Ramp & 190th Street	AM	0.769	C
		PM	0.802	D
23.	Central Avenue & Victoria Street	AM	0.799	C
		PM	0.736	C
24.	Hamilton Avenue & Del Amo Blvd	AM	0.546	A
		PM	0.768	C
25 [a].	Hamilton Avenue & I-110 SB Ramps	AM	40.0	E
		PM	81.8	F
[b]		AM	0.668	B
		PM	0.659	B
26.	Figueroa Street & Del Amo Boulevard	AM	0.730	C
		PM	0.822	D
27.	Figueroa Street & I-110 NB Ramps	AM	0.698	B
		PM	0.705	C
28.	SR-91 EB Ramps & Albertoni Street	AM	0.551	A
		PM	0.621	B
29 [a].	Main Street & Broadway	AM	17.8	C
		PM	17.1	C
30.	New driveway & MLK Jr Street	AM	New Intersection	
		PM		
31.	Avalon Boulevard & New driveway	AM	New Intersection	
		PM		

AM - Weekday AM Peak Hour, PM - Weekday PM Peak Hour
[a] A signal warrant was performed to determine significant impacts for unsignalized intersections. Warrants were met under Existing, Existing with Project, and Future with Project Conditions
[b] Due to the shared jurisdiction, the intersection was analyzed using both HCM (Caltrans) and ICU (LACDPW) methodology

TABLE 5B
EXISTING CONDITIONS (YEAR 2018) - SATURDAY
INTERSECTION PEAK HOUR LEVELS OF SERVICE

No.	Signalized Intersection	Peak Hour	Existing Conditions (Year 2018)	
			V/C Ratio / Delay	LOS
1.	Main Street & MLK Jr Street	MD	0.303	A
2.	Main Street & I-405 NB Off-Ramp	MD	0.321	A
3.	Main Street & I-405 SB On-Ramp	MD	0.328	A
6.	Avalon Boulevard & SR-91 WB On-Ramp	MD	0.424	A
11.	Avalon Boulevard & MLK Jr Street	MD	0.396	A
12.	Avalon Boulevard & Elsmere Drive	MD	0.365	A
13.	Avalon Boulevard & Turmont Street	MD	0.436	A
14.	Avalon Boulevard & Del Amo Boulevard	MD	0.634	B
15.	Avalon Boulevard & I-405 NB Ramps	MD	0.528	A
16.	Avalon Boulevard & I-405 SB Ramps	MD	0.657	B
17.	Main Street & SR-91 WB Ramps	MD	0.277	A
18.	Main Street & Albertoni Street	MD	0.424	A
21.	I-110 NB On-Ramp & 190th Street	MD	0.353	A
22.	I-110 SB Off-Ramp & 190th Street	MD	0.603	B
28	SR-91 EB Ramps & Albertoni Street	MD	0.433	A
30.	New driveway & MLK Jr Street	MD	New Intersection	
31.	AvalonBoulevard & New driveway	MD	New Intersection	

MD - Saturday Midday Peak Hour

Chapter 3
Project Traffic

This chapter describes the assumptions and methodology used in developing the traffic volumes associated with the proposed Project within the Study Area.

PROJECT DESCRIPTION

As described in Chapter 1, The Project involves the redevelopment of a portion of the VGC with new recreation programs that would offer sports and academic enrichment services to underprivileged youth in the greater Los Angeles area and recreation programs for the public. The Project site, owned by the County and located at 340 Martin Luther King, Jr. Street, is bounded by Martin Luther King, Jr. Street to the north, Avalon Boulevard to the east, and the remaining portion of the VGC to the south and west. A separate development, The Creek, is proposed on the remaining portion of the VGC.

PROJECT TRIP GENERATION

The trip generation estimates for the Project were developed based on the rates documented in *Trip Generation, 10th Edition* (Institute of Transportation Engineers [ITE], 2017) and *Trip Generation, 9th Edition* (ITE, 2012), as well as empirical trip generation rates derived for similar land uses.

Trip Generation Rates

The trip generation rates utilized for each land use component are described below:

Golf Course: The trip generation rates for the existing golf course (ITE Land Use Code 430) utilize *Trip Generation, 10th Edition* for weekday trip estimates and *Trip Generation, 9th Edition* (ITE, 2012) for weekend trip estimates[7].

Administrative Offices: The trip generation rates for the proposed administrative office space utilize *Trip Generation, 10th Edition* ITE Land Use Code 710 – General Office for both weekday and weekend trip estimates.

Soccer Center: The Soccer Center is proposed to be utilized by school/community users on weekdays, with youth/adult league and club play generally on weekend evenings and weekends and tournament play on weekends. The description of the weekday operation at the Soccer Center is consistent with the description of *Trip Generation, 10th Edition* ITE Land Use Code 488 – Soccer Complex. On weekends, tournament play is anticipated to occur at the Project and trip generation rates were developed from empirical data collected at the Placer Valley Sports Complex, which operates as a tournament-hosting multi-sports facility in Roseville, California. The empirical trip rates were based on tournament conditions at the sports complex and summarized in *Trip Generation, Parking, and Gate Control Strategies for the Placer Valley Sports Complex, Roseville, California* (Gibson Transportation Consulting, Inc., November 25, 2015).

Tennis Center: Daily activities at the Tennis Center are anticipated to include community uses, player development, recreational activities, and the operation of various USTAF programs. Additionally, the Tennis Center is anticipated to host tournaments at the local to collegiate level along with occasional special events (i.e., professional level tournament, etc.) A trip generation rate was derived from the tournament operation described by the USTAF and compared to the *Trip Generation, 10th Edition* ITE Land Use Code 490 – Tennis Courts rate. This comparison indicated that the derived trip generation rate was lower than the ITE trip rate. Based on this comparison and for the purposes of a conservative analysis, the operation of the Tennis Center is assumed to be encompassed by ITE Land Use Code 490; as such, this trip rate was used to develop the trip generation estimate.

[7] *Trip Generation, 10th Edition* does not provide a golf course weekend trip generation rate based on acreage.

Learning Center: The Tiger Woods Foundation has described the Learning Center operation as largely occurring on weekdays, with a daytime component for elementary school students and an after-school component for middle to high school students. Learning Center trips would mainly be generated by center staff and pick-up activities after school. Daytime elementary program students will be transported to the Learning Center by private bus. In addition to the academic programs, periodic programming and community events are anticipated on weekday evenings and on weekends. Based on the anticipated activity and for the purposes of a conservative analysis, the Learning Center is assumed to operate similarly to *Trip Generation, 10th Edition* ITE Land Use Code 495 – Recreational Community Center; as such, this trip rate was used to develop the trip generation estimates.

Player Development Facility: As described by USTAF, the Player Development Facility is an integral component of the Tennis Center and is anticipated to be used in conjunction with the tennis courts at the Tennis Center. Based on the anticipated activity level and for the purposes of a conservative analysis, the Player Development Facility is assumed to operate similarly to *Trip Generation, 10th Edition* ITE Land Use Code 495 – Recreation Community Center; as such, this trip rate was used to develop the trip generation estimates.

Other Recreational Amenities/Skate Park: Trip generation rates for the other recreational amenities were based on the empirical trip generation rates developed for a facility in Huntington Beach, California. Those trip rates are summarized in *Center Avenue Skatepark Traffic Analysis* (Austin-Foust Associates, Inc., 2011).

Other Uses: The Welcome Center and other small buildings for maintenance/storage activities either function as amenities to the Project or are ancillary to the primary uses for trip generation purposes and do not separately generate new trips.

The trip generation rates described above are summarized in Table 6.

Trip Generation Summary

The peak hour trip generation forecasts for the Project were derived from the trip generation rates described above. Project trip generation was analyzed during the weekday morning and afternoon peak hours, as well as the Saturday midday peak hour.

As detailed in Table 6, the Project is expected to generate 4,133 new weekday trips, including 205 morning peak hour and 460 afternoon peak hour trips. On Saturday, a total of 7,106 daily trips are estimated with 851 mid-day peak hour trips.

The existing portion of the VGC, to be replaced, is currently estimated to generate 325 weekday trips, including 17 morning peak hour and 24 afternoon peak hour trips. On Saturday, a total of 506 daily trips are estimated, including 56 mid-day peak hour trips.

Applying the existing trips to be removed from the existing portion of the VGC, the Project is estimated to generate 3,808 net new weekday trips, including 188 net new morning peak hour trips and 436 net new afternoon peak hour trips. On Saturday, a total of 6,600 net new daily trips are anticipated, including 795 net new mid-day peak hour trips.

PROJECT TRIP DISTRIBUTION

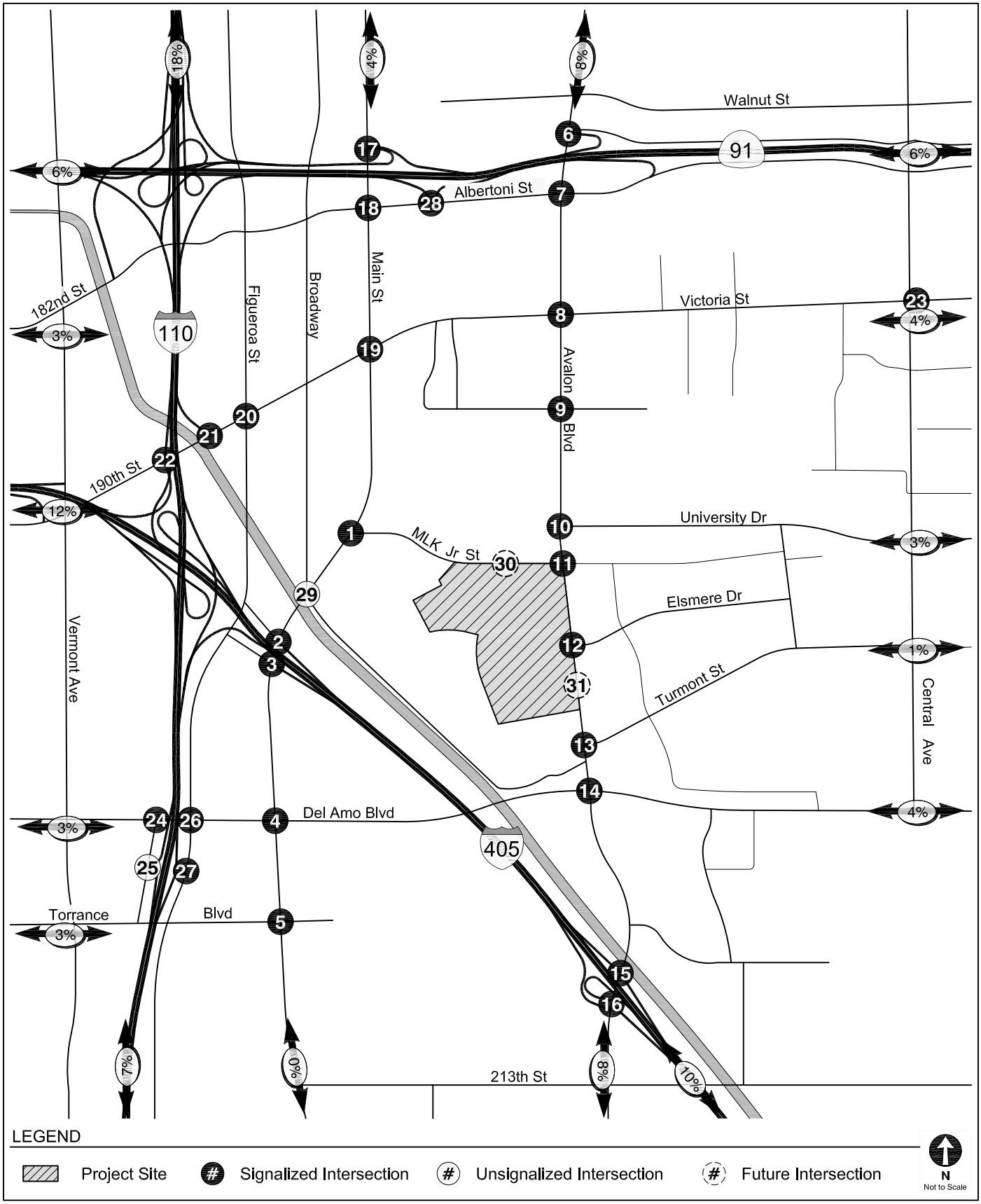
The geographic distribution of trips generated by the Project is dependent on the location of residential centers from which users of the Project would be drawn, characteristics of the street system serving the Project site, the level of accessibility of the routes to and from the Project site, existing intersection traffic volumes, the Project ingress/egress availability based on the proposed site access and circulation scheme, and the location of the proposed driveways, as well as input from LACDPW staff.

Based on these considerations, traffic entering and exiting the Project was assigned to the surrounding street system. The regional-level and intersection-level trip distribution pattern for the Project at the study intersections is shown in Figures 5 and 6. Generally, the pattern is as follows:

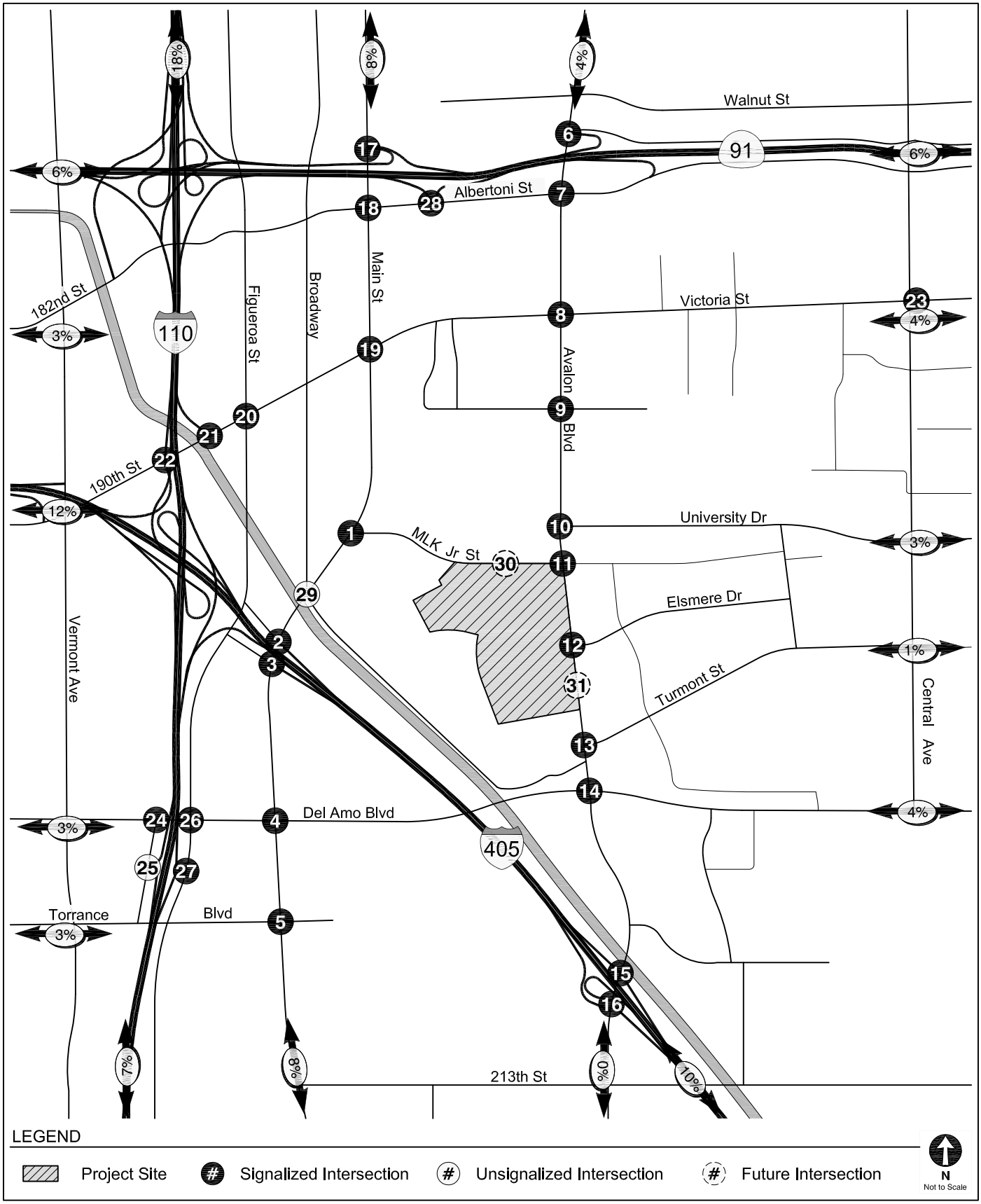
- 25% to/from the north (I-110, I-405, Main Street, Avalon Boulevard)
- 25% to/from the east (SR 91, Albertoni Street, Victoria Street)
- 25% to/from the south (I-110, I-405, Main Street, Avalon Boulevard)
- 25% to/from the west (190th Street, Del Amo Boulevard)

PROJECT TRIP ASSIGNMENT

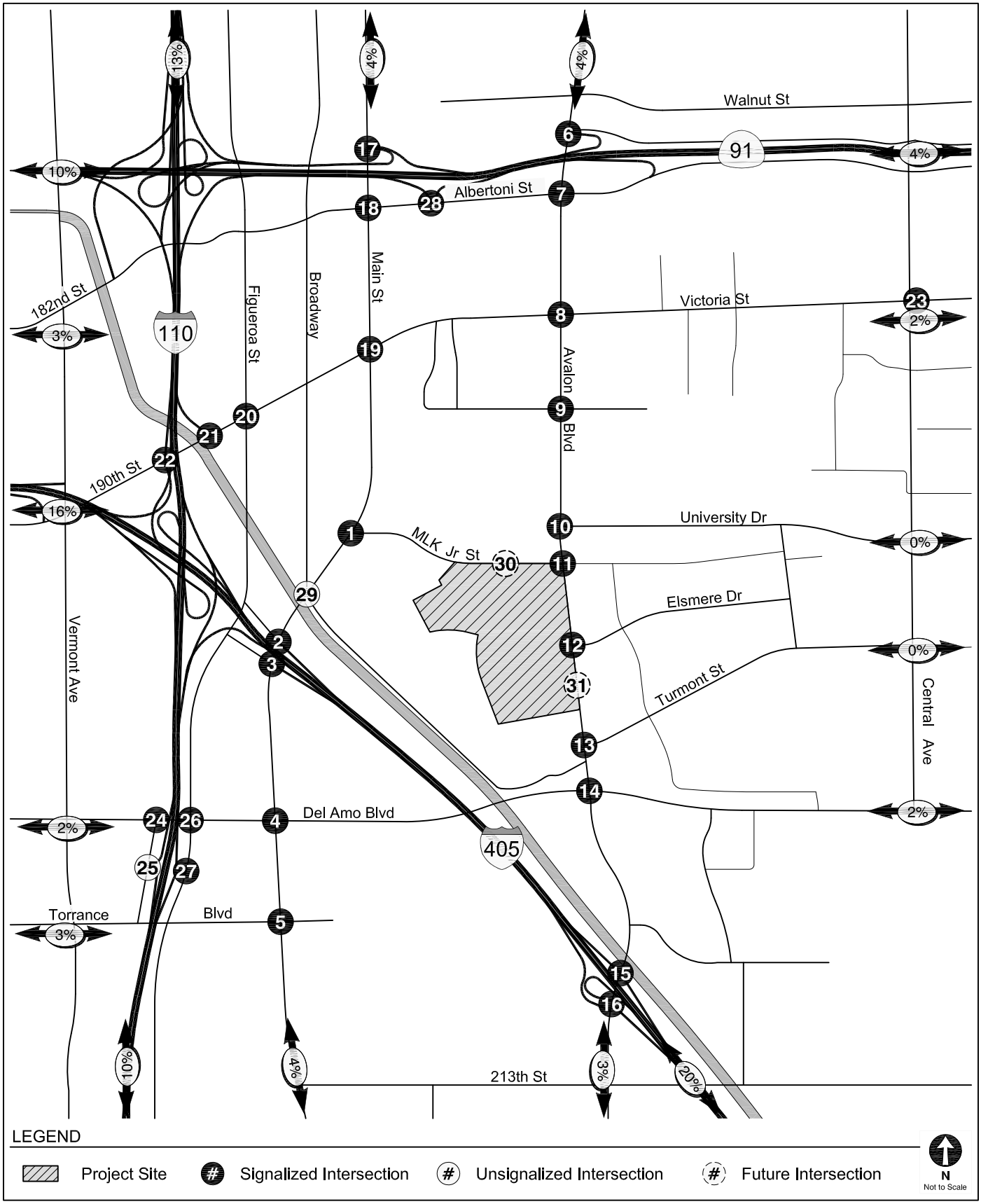
The Project trip generation estimates summarized in Table 6 and the trip distribution pattern shown in Figure 6A, 5B, and 5C were used to assign the Project-generated traffic through the study intersections. Figures 7A and 7B illustrate the combined Project-only traffic volumes at the study intersections during typical weekday morning and afternoon and Saturday peak hours.



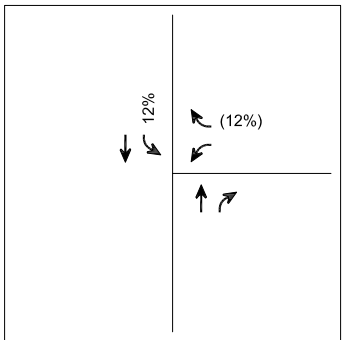
REGIONAL TRIP DISTRIBUTION WEEKDAY SOCCER	FIGURE 5A



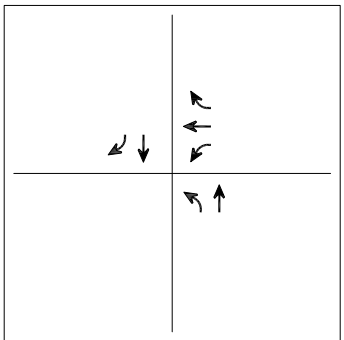
REGIONAL TRIP DISTRIBUTION WEEKDAY TENNIS / CENTER	FIGURE 5B



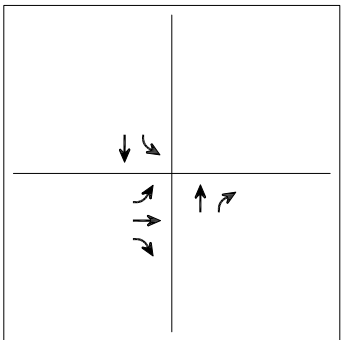
REGIONAL TRIP DISTRIBUTION WEEKEND	FIGURE 5C



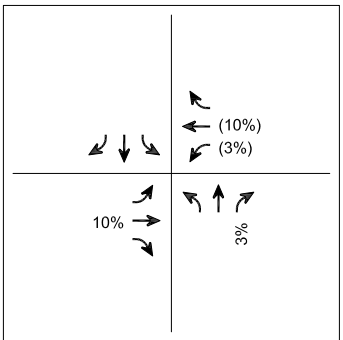
1. Main Street & MLK Jr Street



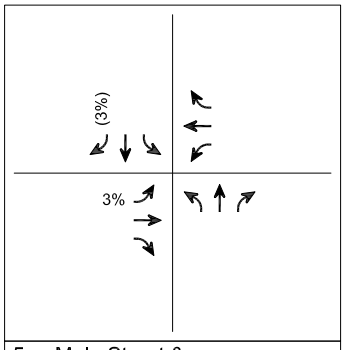
2. Main Street & I-405 NB Off-Ramp



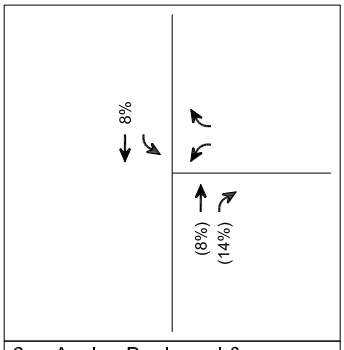
3. Main Street & I-405 SB On-Ramp



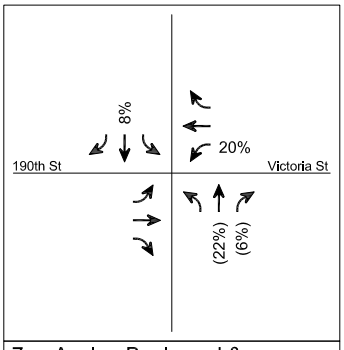
4. Main Street & Del Amo Boulevard



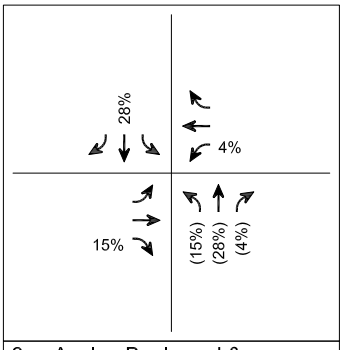
5. Main Street & Torrance Boulevard



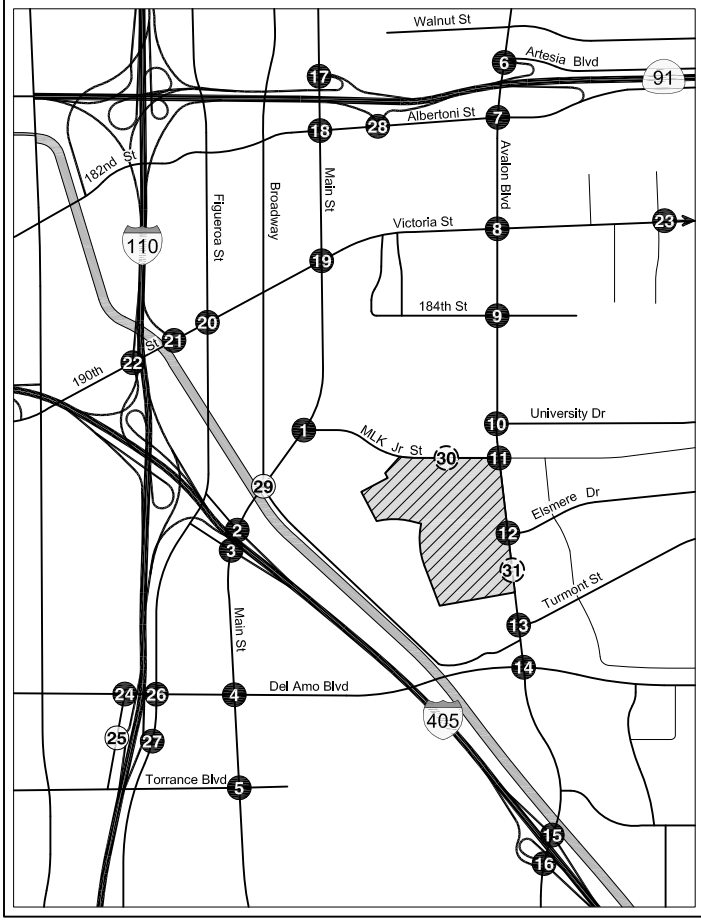
6. Avalon Boulevard & SR-91 WB On-Ramp

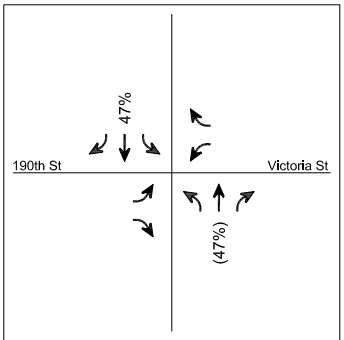


7. Avalon Boulevard & Albertoni Street

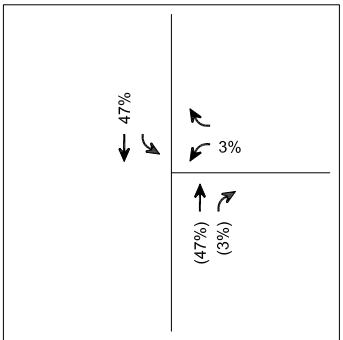


8. Avalon Boulevard & Victoria Street





9. Avalon Boulevard & 184th St / StubHub Center



10. Avalon Boulevard & University Drive

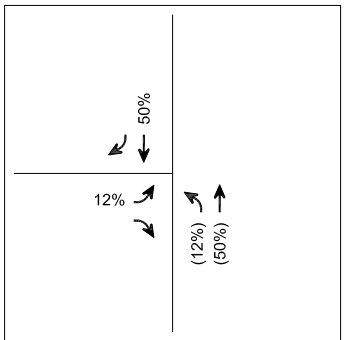
LEGEND

- Project Site
- Signalized Intersection
- Unsignalized Intersection
- Future Intersection
- %(%) Inbound(Outbound) Trip Percentage

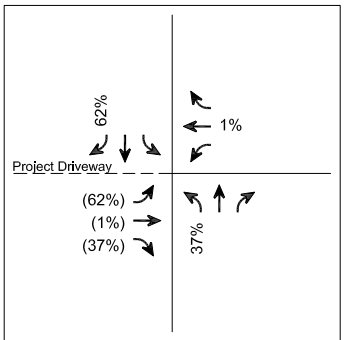
N
Not to Scale

PROJECT TRIP DISTRIBUTION
WEEKDAY SOCCER

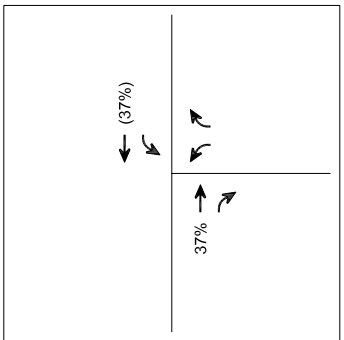
FIGURE 6A



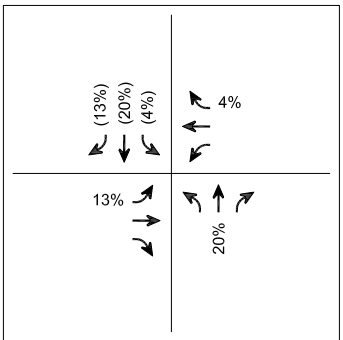
11. Avalon Boulevard & MLK Jr Street



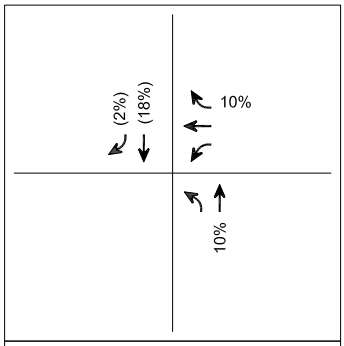
12. Avalon Boulevard & Elsmere Drive



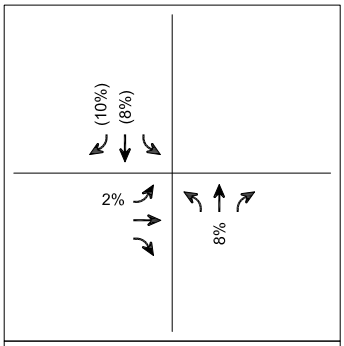
13. Avalon Boulevard & Turmont Street



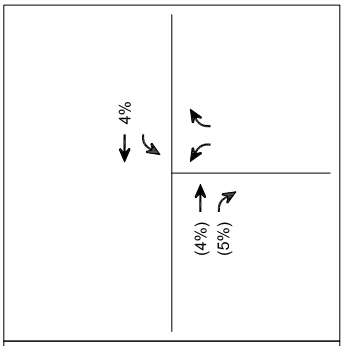
14. Avalon Boulevard & Del Amo Boulevard



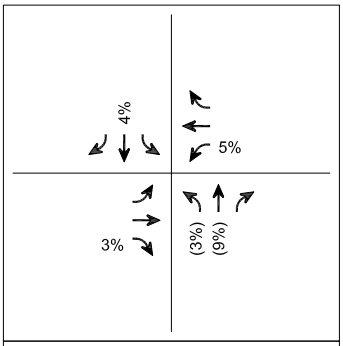
15. Avalon Boulevard & I-405 NB Ramps



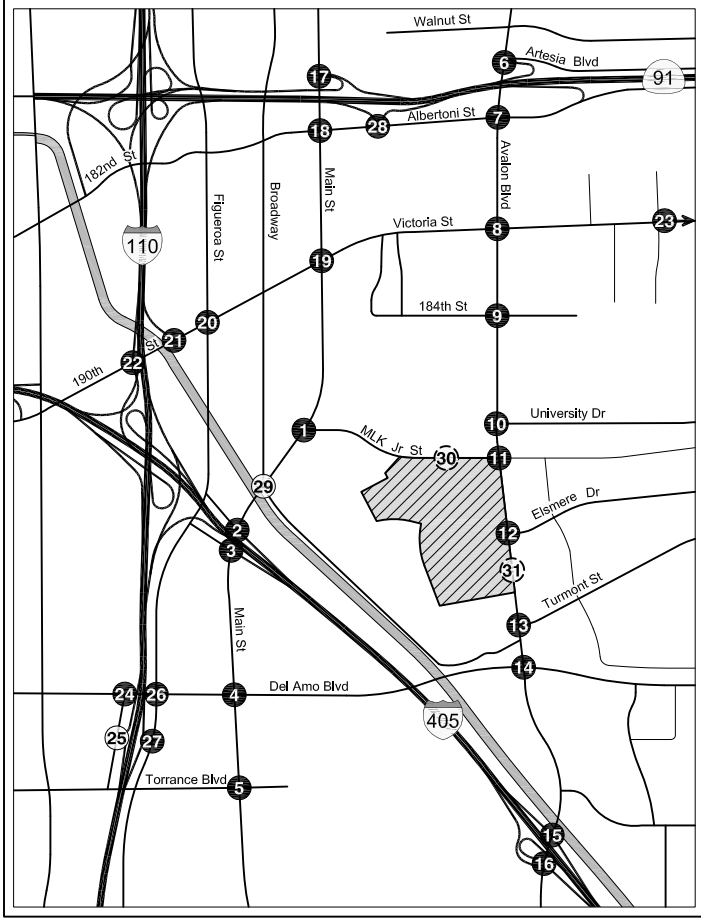
16. Avalon Boulevard & I-405 SB Ramps

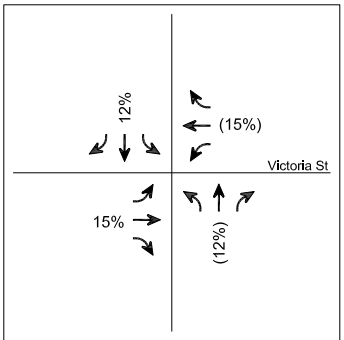


17. Main Street & SR-91 WB Ramps

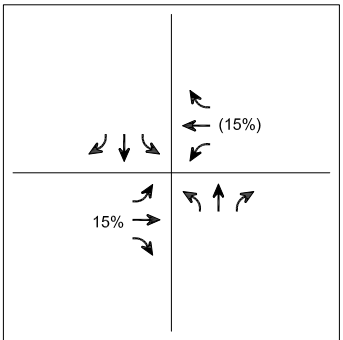


18. Main Street & Albertoni Street





19. Main Street & Victoria Street



20. Figueroa Street & Victoria Street

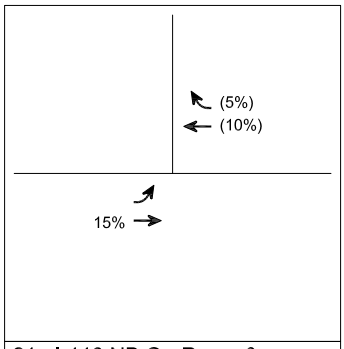
LEGEND

- Project Site
- Signalized Intersection
- Unsignalized Intersection
- Future Intersection
- %(%) Inbound(Outbound) Trip Percentage

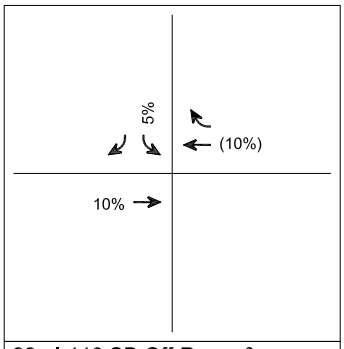
N
Not to Scale

PROJECT TRIP DISTRIBUTION
WEEKDAY SOCCER

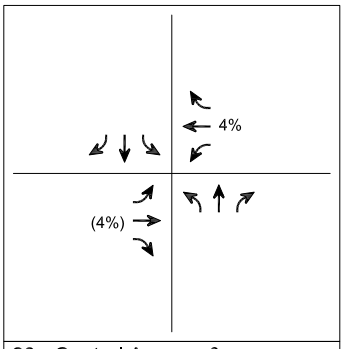
FIGURE
6A (CONT.)



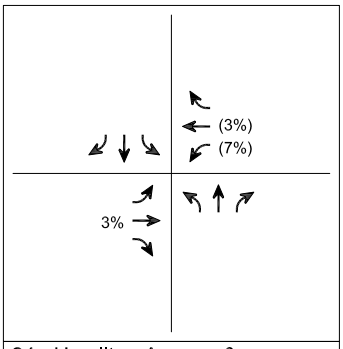
21. I-110 NB On-Ramp & 190th Street



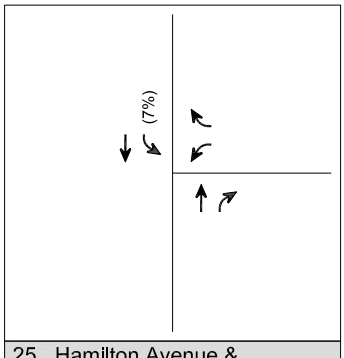
22. I-110 SB Off-Ramp & 190th Street



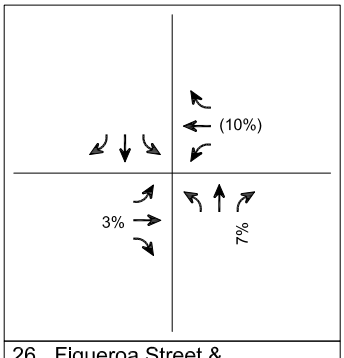
23. Central Avenue & Victoria Street



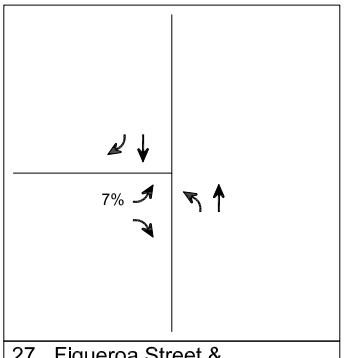
24. Hamilton Avenue & Del Amo Boulevard



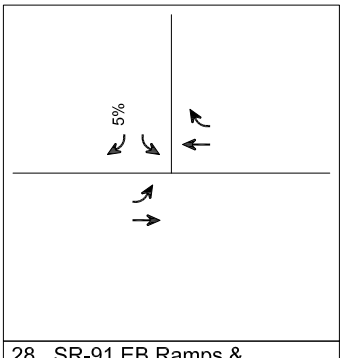
25. Hamilton Avenue & I-110 SB Ramps



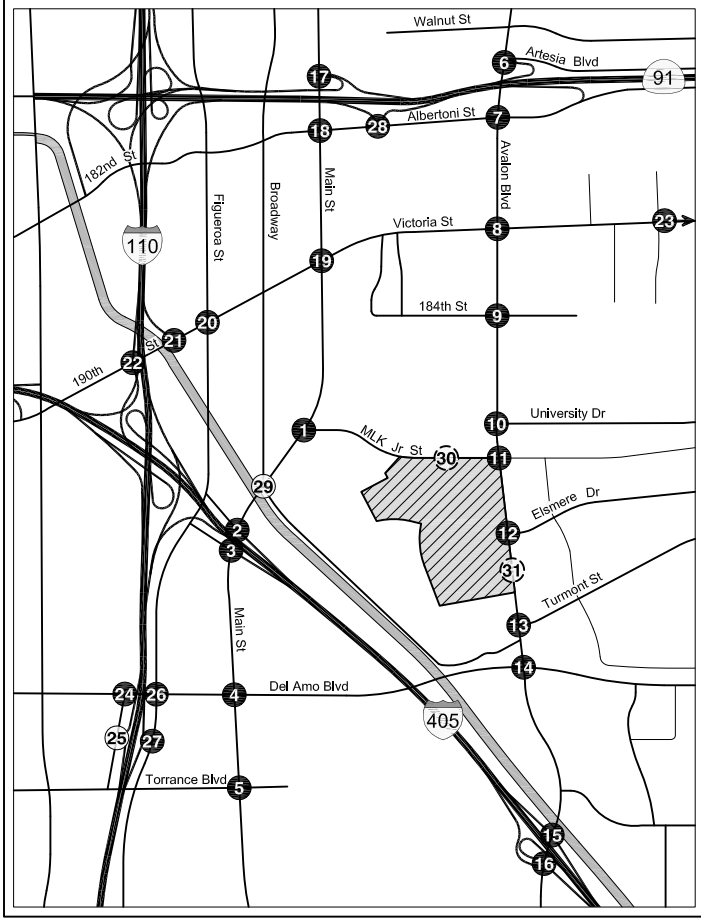
26. Figueroa Street & Del Amo Boulevard

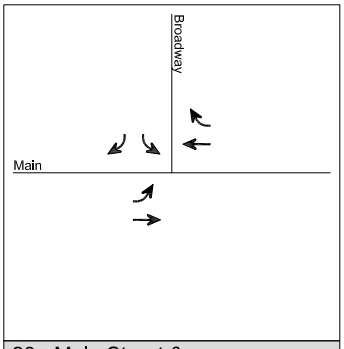


27. Figueroa Street & I-110 NB Ramps

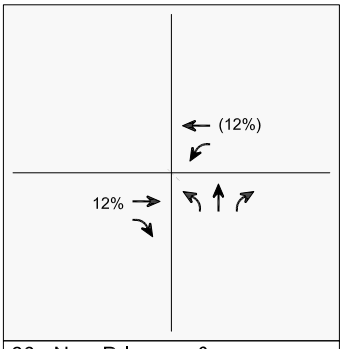


28. SR-91 EB Ramps & Albertoni Street





29. Main Street & Broadway

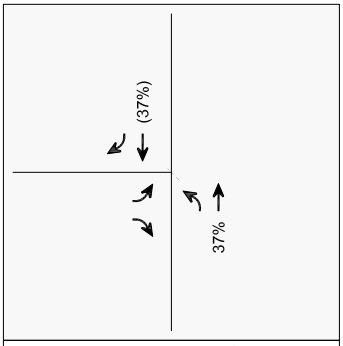


30. New Driveway & Martin Luther King Jr Street

N
Not to Scale

LEGEND

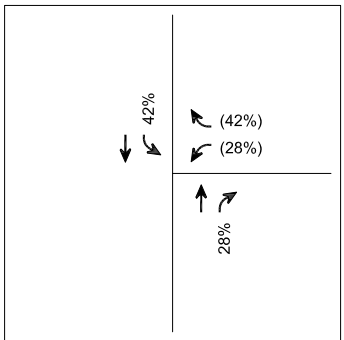
- Project Site
- Signalized Intersection
- Unsignalized Intersection
- Future Intersection
- %(%) Inbound(Outbound) Trip Percentage



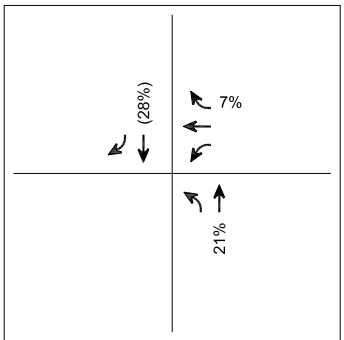
31. Avalon Boulevard & New Driveway

PROJECT TRIP DISTRIBUTION
WEEKDAY SOCCER

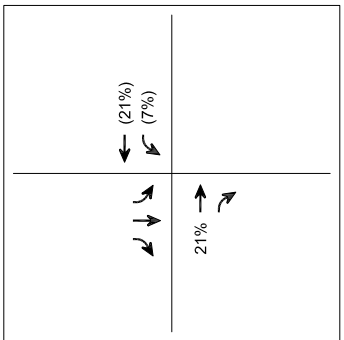
FIGURE
6A (CONT.)



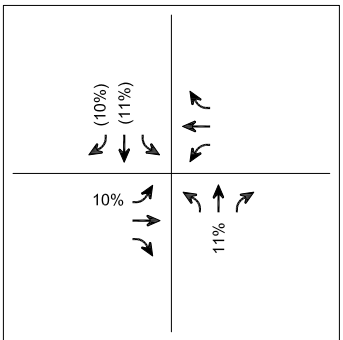
1. Main Street & MLK Jr Street



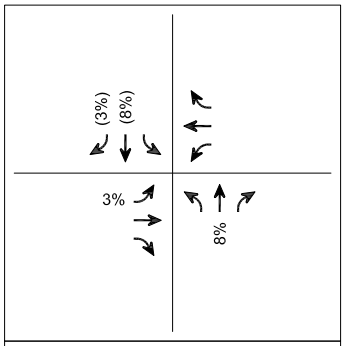
2. Main Street & I-405 NB Off-Ramp



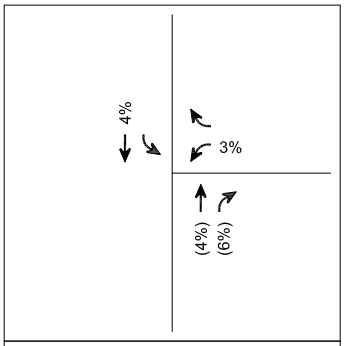
3. Main Street & I-405 SB On-Ramp



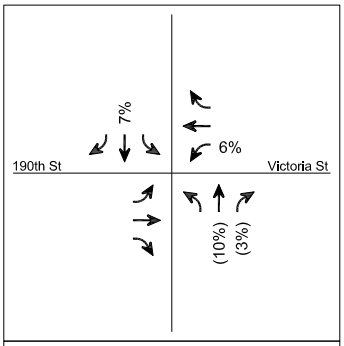
4. Main Street & Del Amo Boulevard



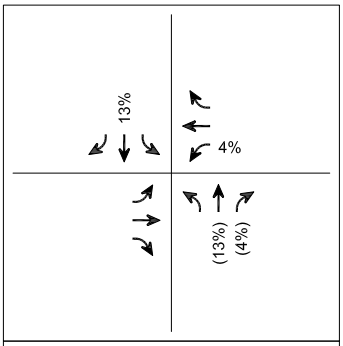
5. Main Street & Torrance Boulevard



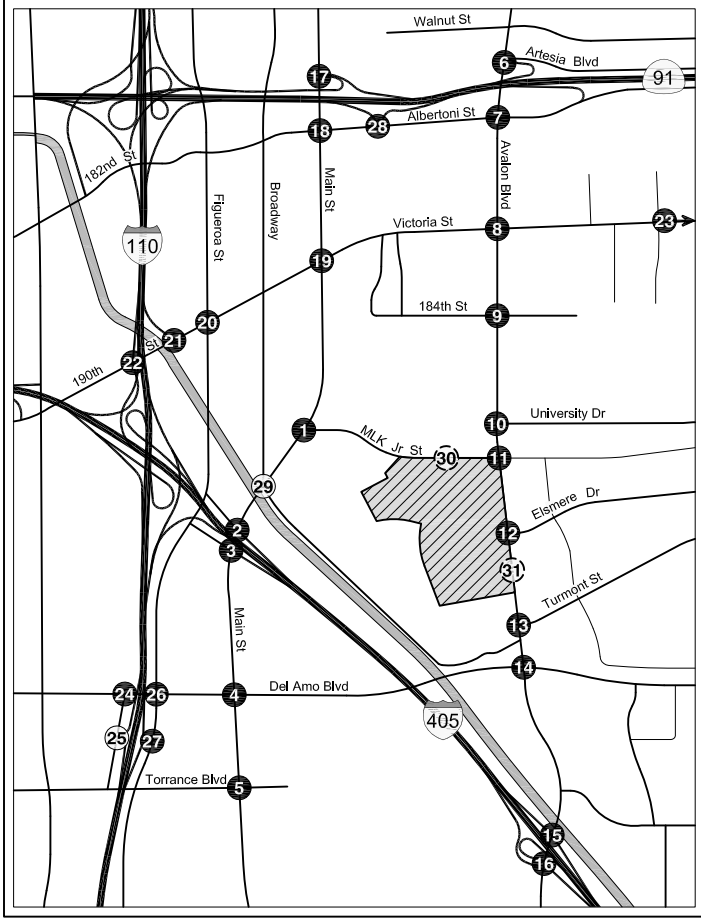
6. Avalon Boulevard & SR-91 WB On-Ramp

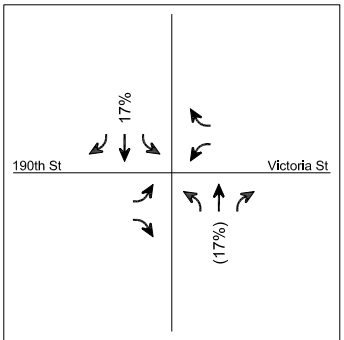


7. Avalon Boulevard & Albertoni Street

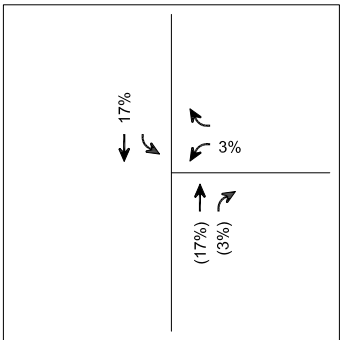


8. Avalon Boulevard & Victoria Street





9. Avalon Boulevard & 184th St / StubHub Center



10. Avalon Boulevard & University Drive

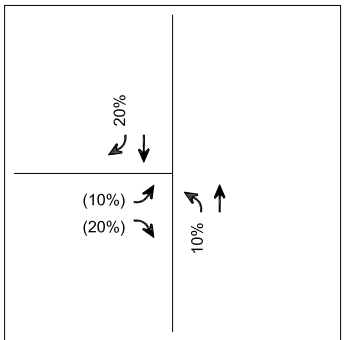
LEGEND

- Project Site
- Signalized Intersection
- Unsignalized Intersection
- Future Intersection
- %(%) Inbound(Outbound) Trip Percentage

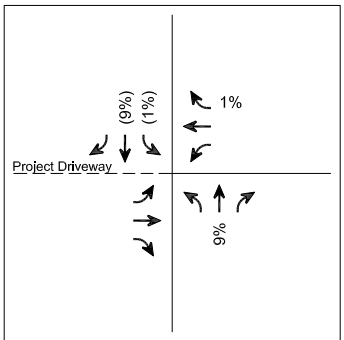
N
Not to Scale

PROJECT TRIP DISTRIBUTION
WEEKDAY NON-SOCCER

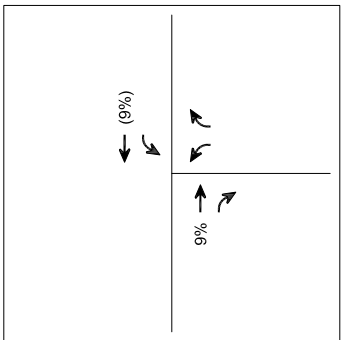
FIGURE 6B



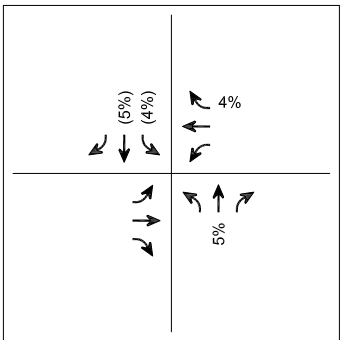
11. Avalon Boulevard & MLK Jr Street



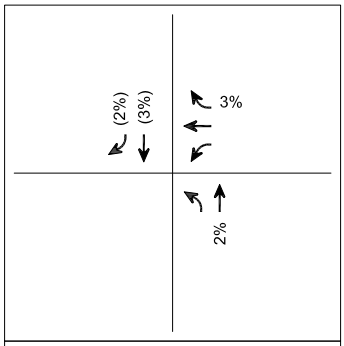
12. Avalon Boulevard & Elsmere Drive



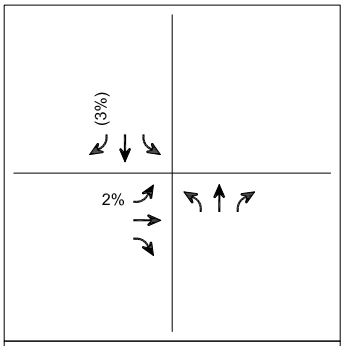
13. Avalon Boulevard & Turmont Street



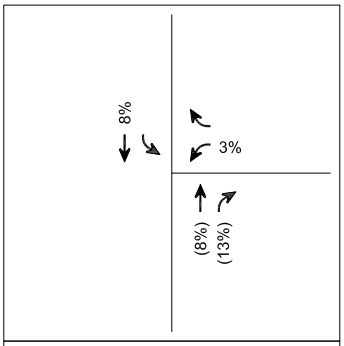
14. Avalon Boulevard & Del Amo Boulevard



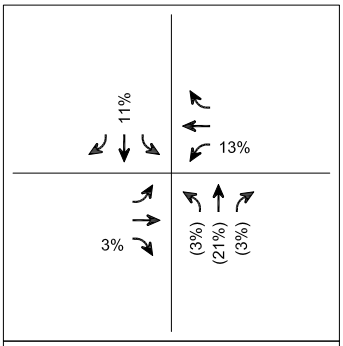
15. Avalon Boulevard & I-405 NB Ramps



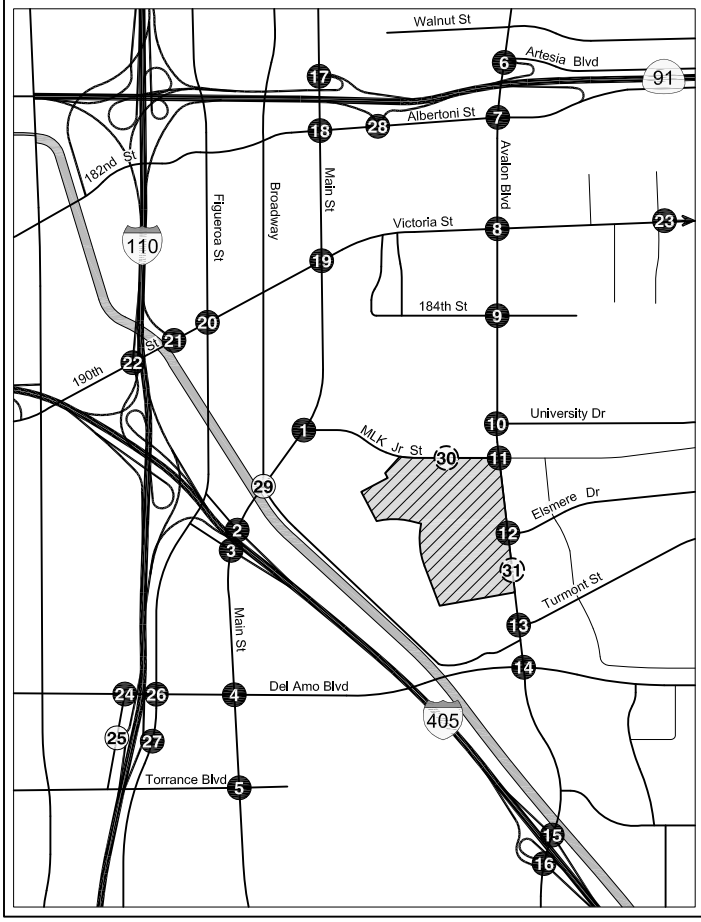
16. Avalon Boulevard & I-405 SB Ramps

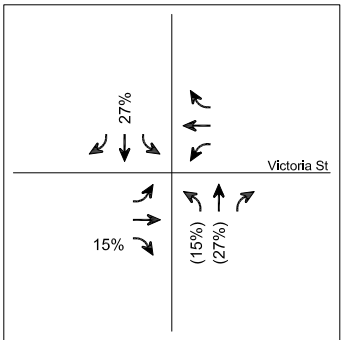


17. Main Street & SR-91 WB Ramps

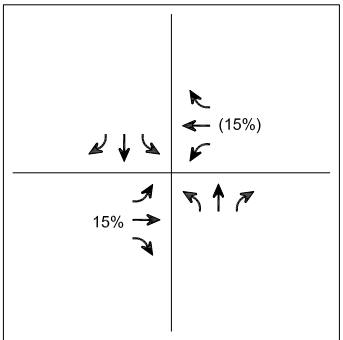


18. Main Street & Albertoni Street





19. Main Street & Victoria Street



20. Figueroa Street & Victoria Street

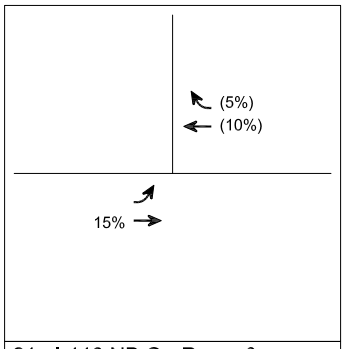
LEGEND

- Project Site
- Signalized Intersection
- Unsignalized Intersection
- Future Intersection
- %(%) Inbound(Outbound) Trip Percentage

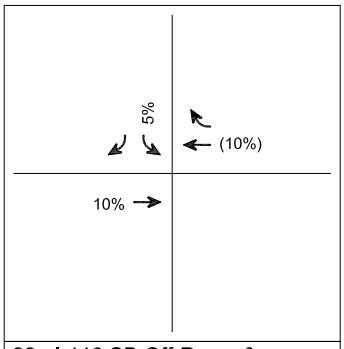
N
Not to Scale

PROJECT TRIP DISTRIBUTION
WEEKDAY NON-SOCCER

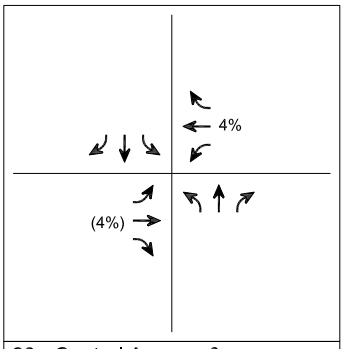
FIGURE
6B (CONT.)



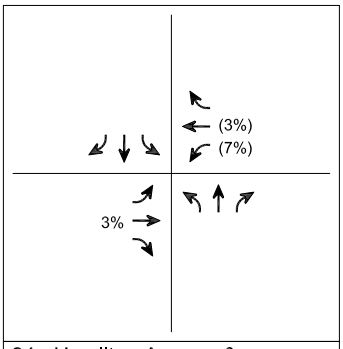
21. I-110 NB On-Ramp & 190th Street



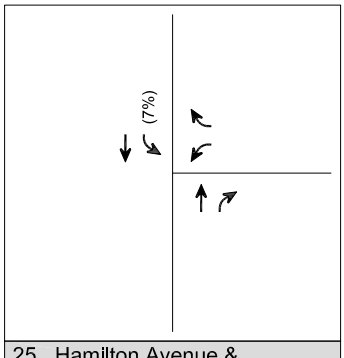
22. I-110 SB Off-Ramp & 190th Street



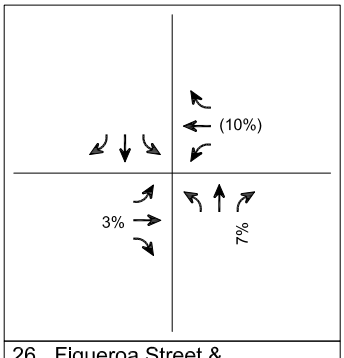
23. Central Avenue & Victoria Street



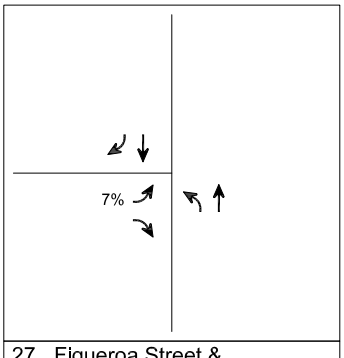
24. Hamilton Avenue & Del Amo Boulevard



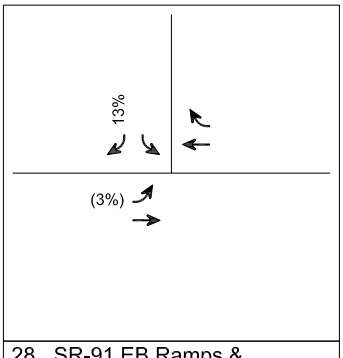
25. Hamilton Avenue & I-110 SB Ramps



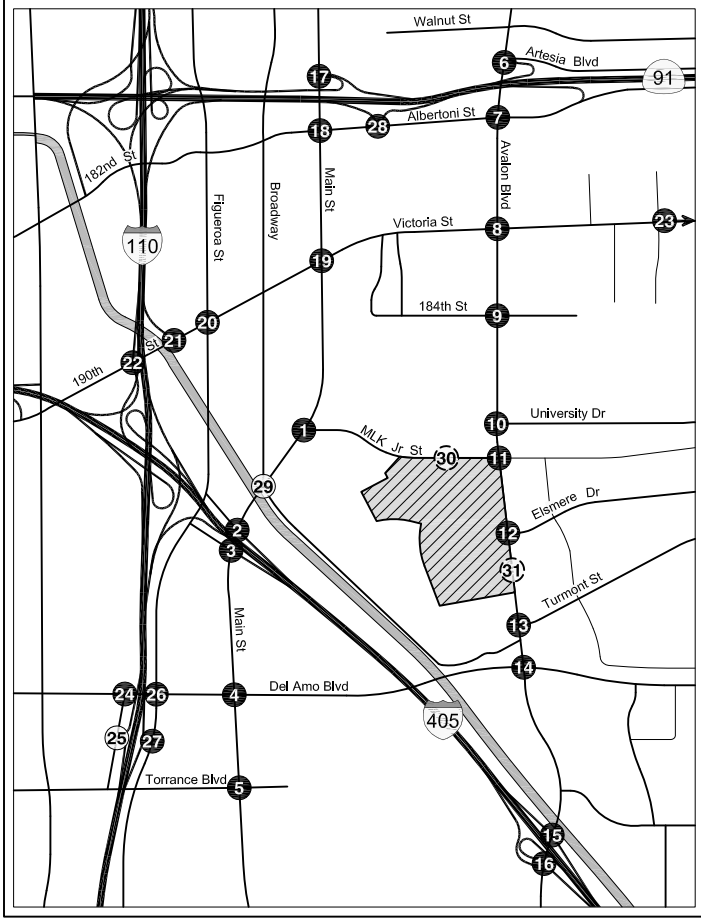
26. Figueroa Street & Del Amo Boulevard

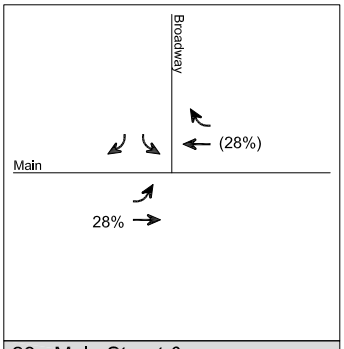


27. Figueroa Street & I-110 NB Ramps

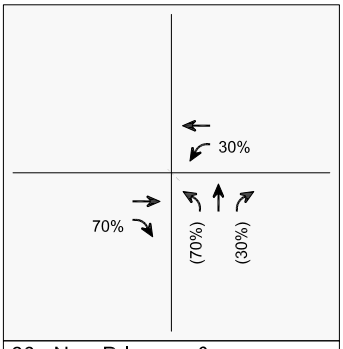


28. SR-91 EB Ramps & Albertoni Street





29. Main Street & Broadway

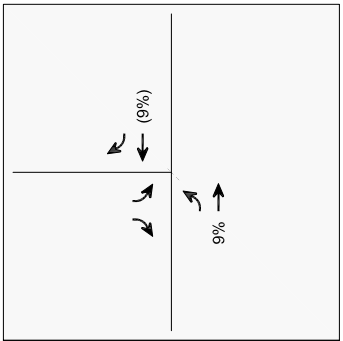


30. New Driveway & Martin Luther King Jr Street

N
Not to Scale

LEGEND

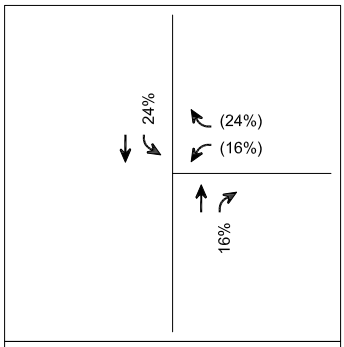
- Project Site
- Signalized Intersection
- Unsignalized Intersection
- Future Intersection
- %(%) Inbound(Outbound) Trip Percentage



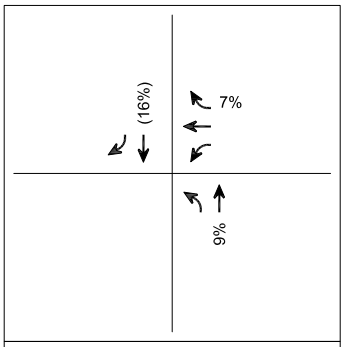
31. Avalon Boulevard & New Driveway

PROJECT TRIP DISTRIBUTION
WEEKDAY NON-SOCCER

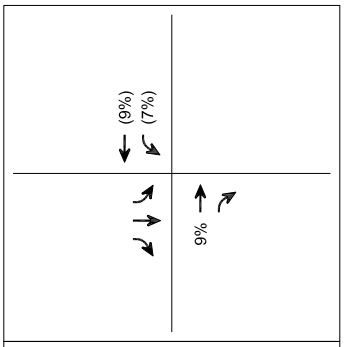
FIGURE
6B (CONT.)



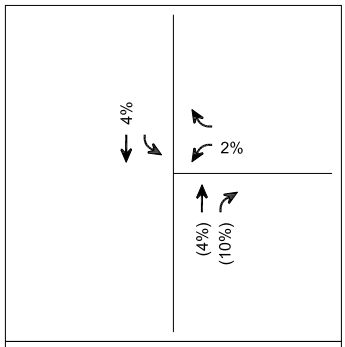
1. Main Street & MLK Jr Street



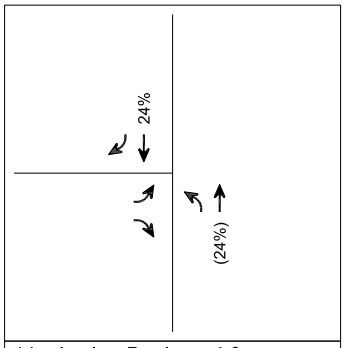
2. Main Street & I-405 NB Off-Ramp



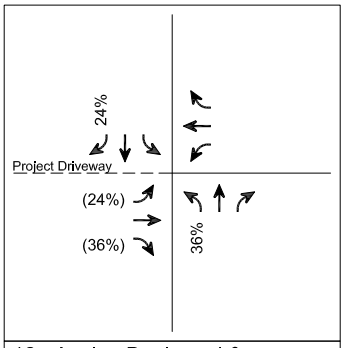
3. Main Street & I-405 SB On-Ramp



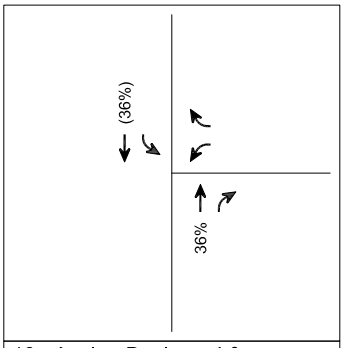
6. Avalon Boulevard & SR-91 WB On-Ramp



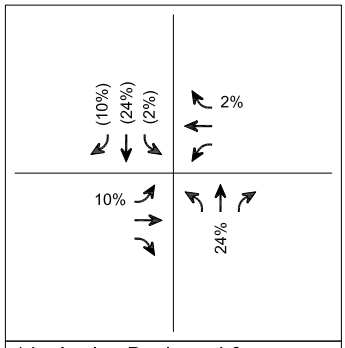
11. Avalon Boulevard & MLK Jr Street



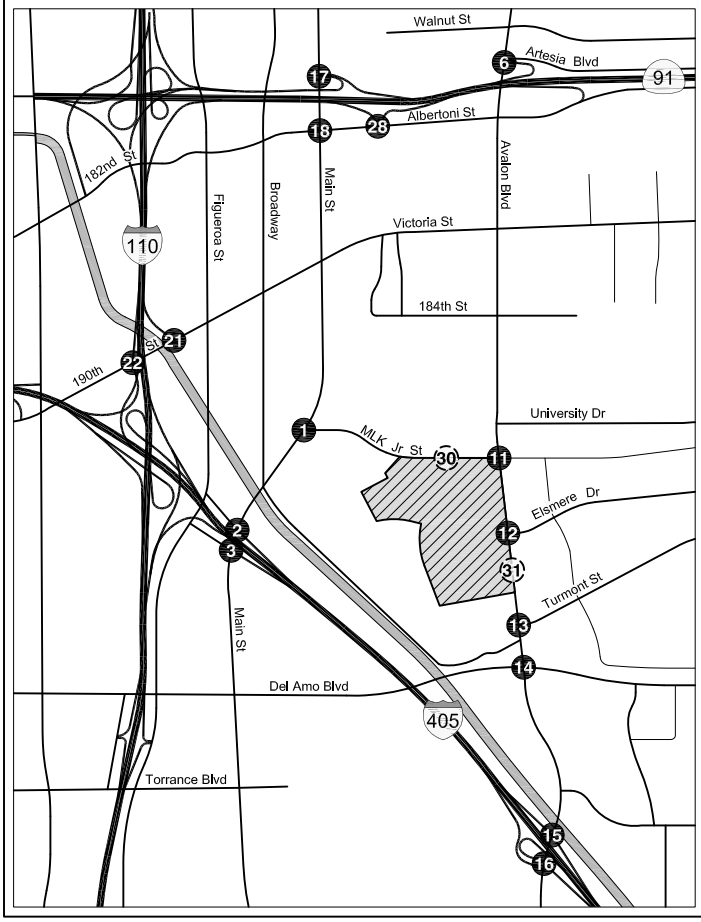
12. Avalon Boulevard & Elsmere Drive

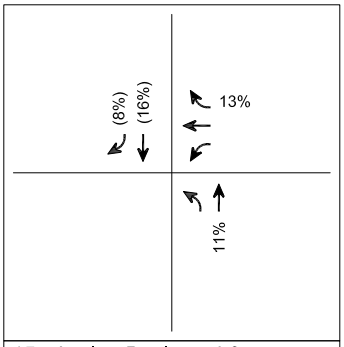


13. Avalon Boulevard & Turmont Street

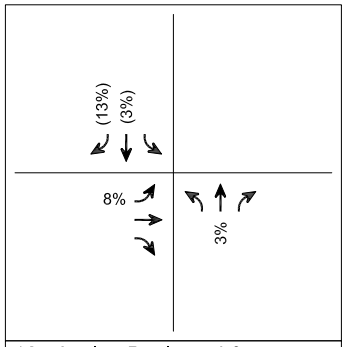


14. Avalon Boulevard & Del Amo Boulevard





15. Avalon Boulevard & I-405 NB Ramps



16. Avalon Boulevard & I-405 SB Ramps

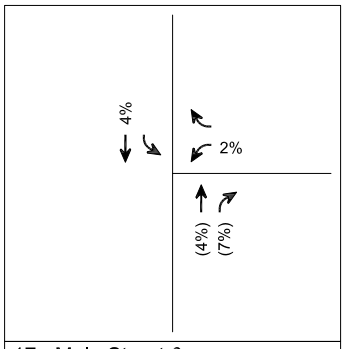
LEGEND

- Project Site
- # Signalized Intersection
- # Unsignalized Intersection
- # Future Intersection
- %(%) Inbound(Outbound) Trip Percentage

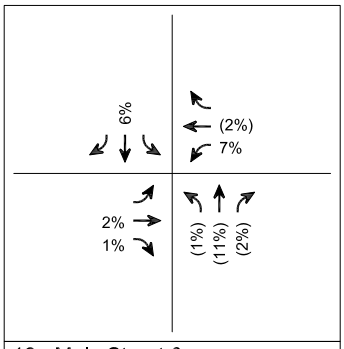
N
Not to Scale

PROJECT TRIP DISTRIBUTION
SATURDAY

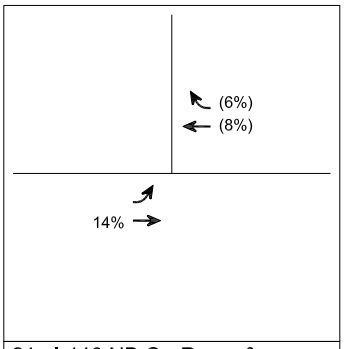
FIGURE
6C



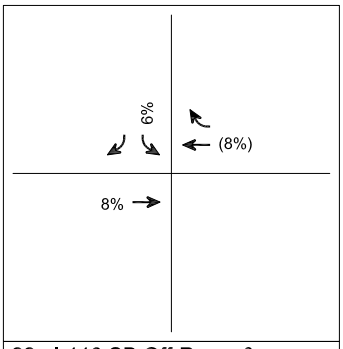
17. Main Street & SR-91 WB Ramps



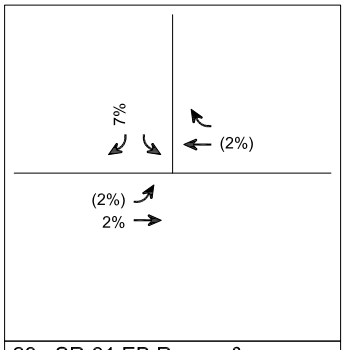
18. Main Street & Albertoni Street



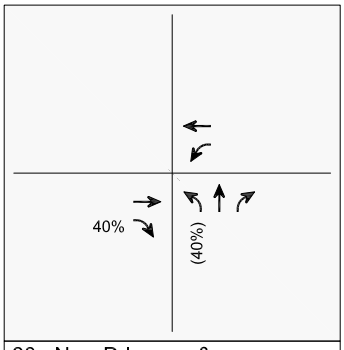
21. I-110 NB On-Ramp & 190th Street



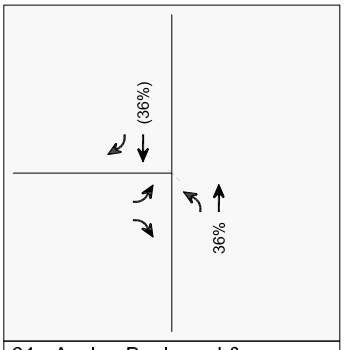
22. I-110 SB Off-Ramp & 190th Street



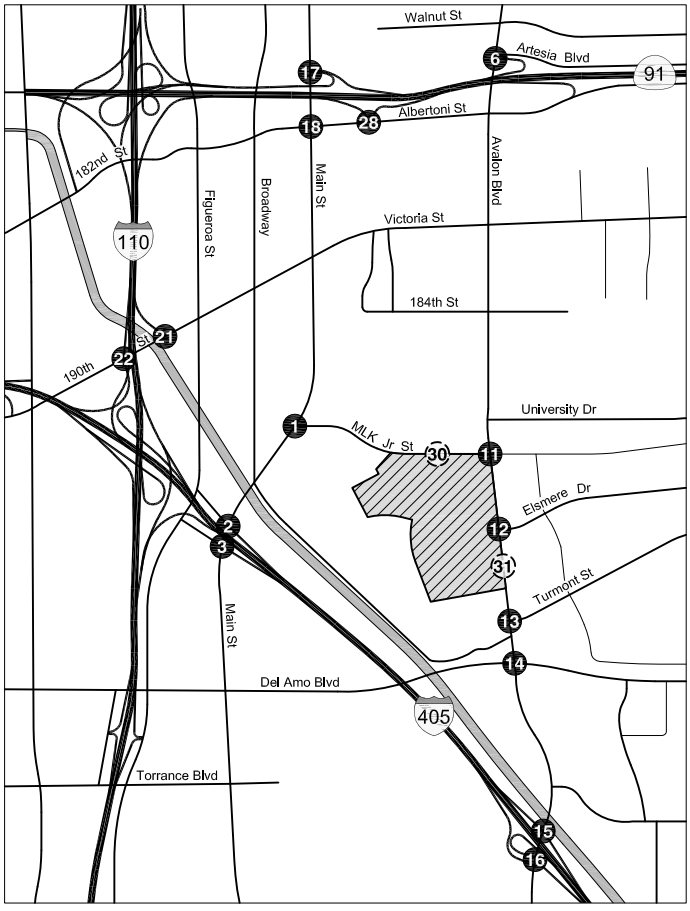
28. SR-91 EB Ramps & Albertoni Street



30. New Driveway & Martin Luther King Jr Street



31. Avalon Boulevard & New Driveway



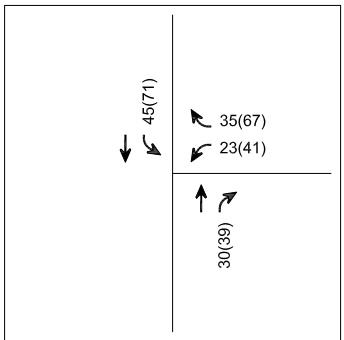
LEGEND

- Project Site
- Signalized Intersection
- Unsignalized Intersection
- Future Intersection
- %(%) Inbound(Outbound) Trip Percentage

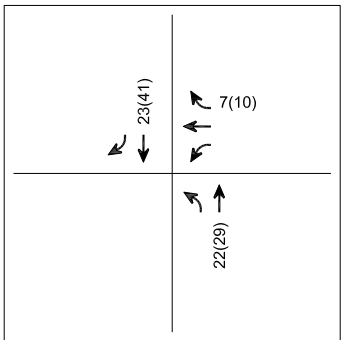
N
Not to Scale

PROJECT TRIP DISTRIBUTION
SATURDAY

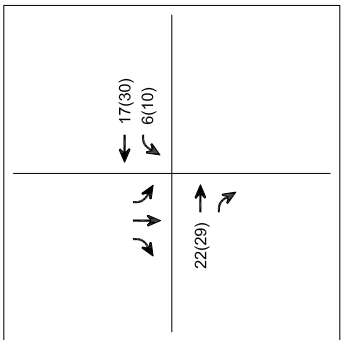
FIGURE
6C (CONT.)



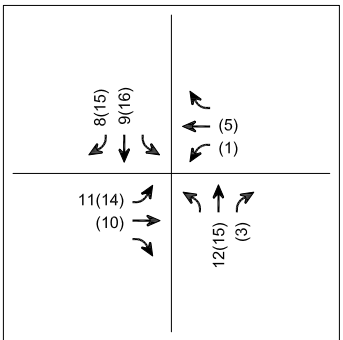
1. Main Street & MLK Jr Street



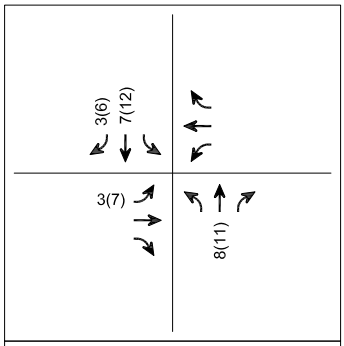
2. Main Street & I-405 NB Off-Ramp



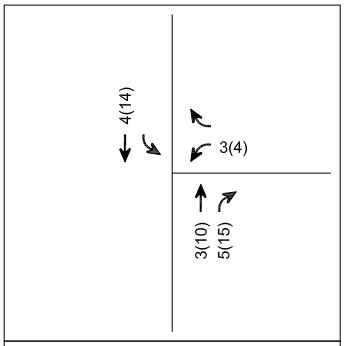
3. Main Street & I-405 SB On-Ramp



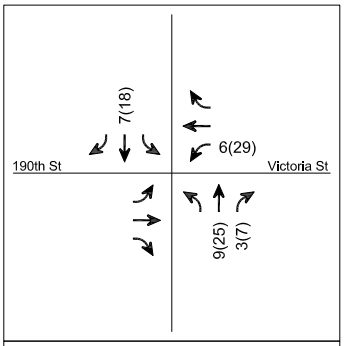
4. Main Street & Del Amo Boulevard



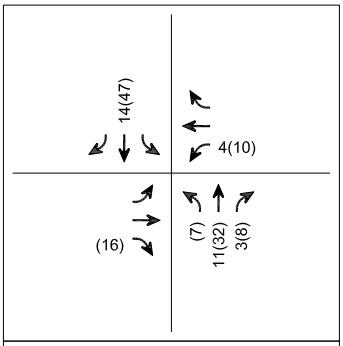
5. Main Street & Torrance Boulevard



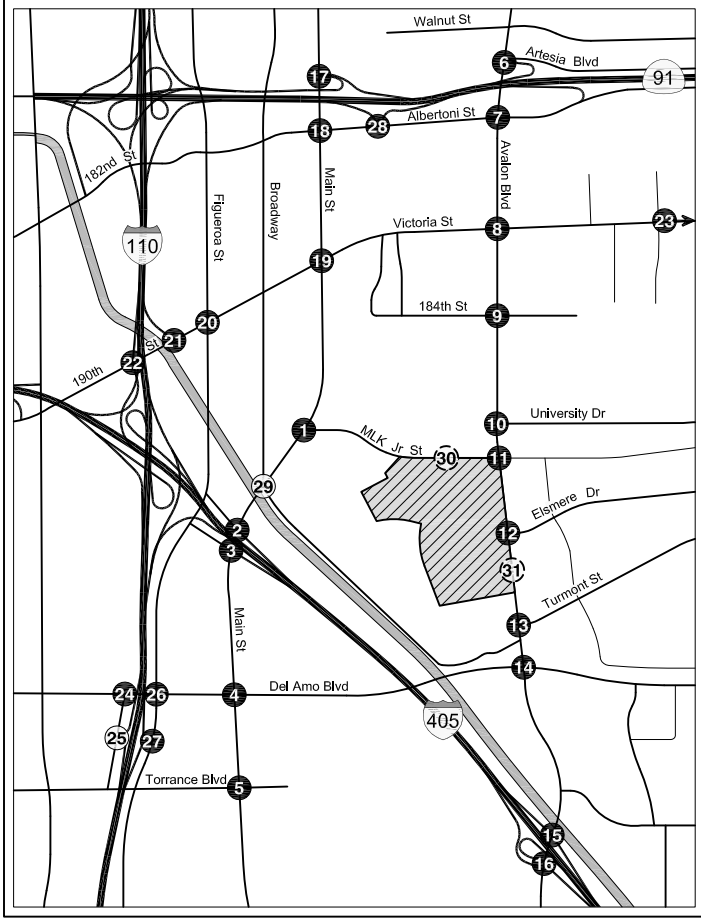
6. Avalon Boulevard & SR-91 WB On-Ramp

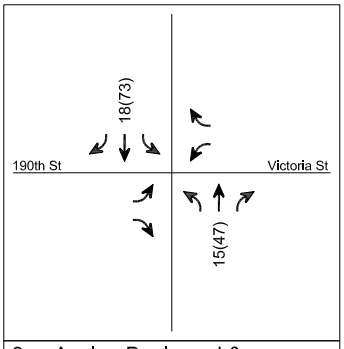


7. Avalon Boulevard & Albertoni Street

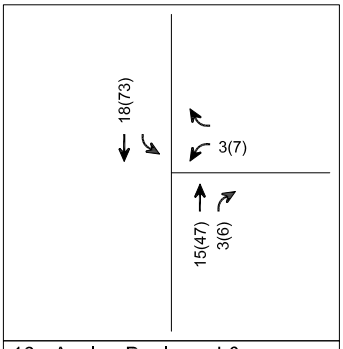


8. Avalon Boulevard & Victoria Street





9. Avalon Boulevard & 184th St / StubHub Center



10. Avalon Boulevard & University Drive

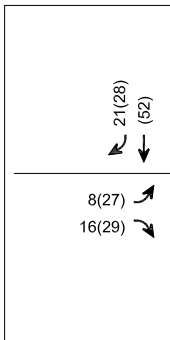
LEGEND

- Project Site
- Signalized Intersection
- Unsignalized Intersection
- Future Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes

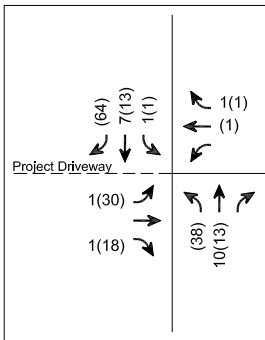
N
Not to Scale

PROJECT-ONLY
WEEKDAY PEAK HOUR TRAFFIC VOLUMES

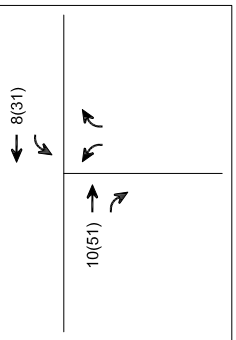
FIGURE 7A



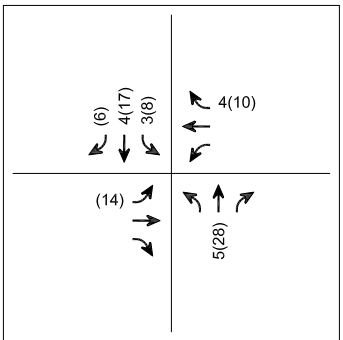
11. Avalon Boulevard & MLK Jr Street



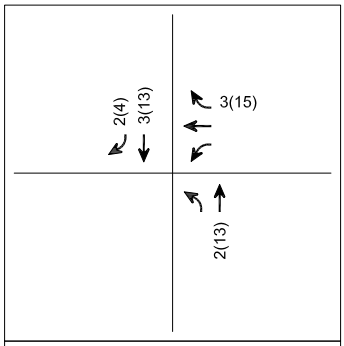
12. Avalon Boulevard & Elsmere Drive



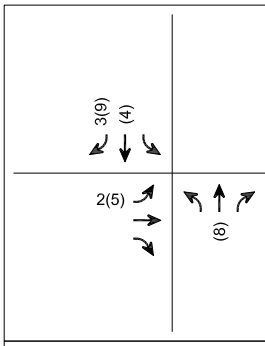
13. Avalon Boulevard & Turmont Street



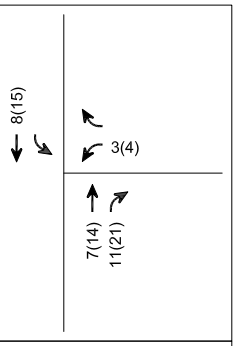
14. Avalon Boulevard & Del Amo Boulevard



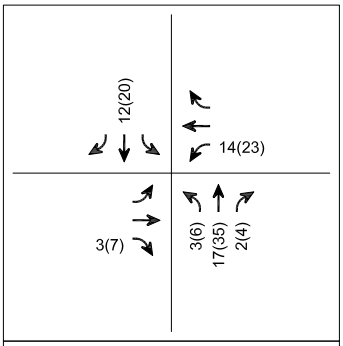
15. Avalon Boulevard & I-405 NB Ramps



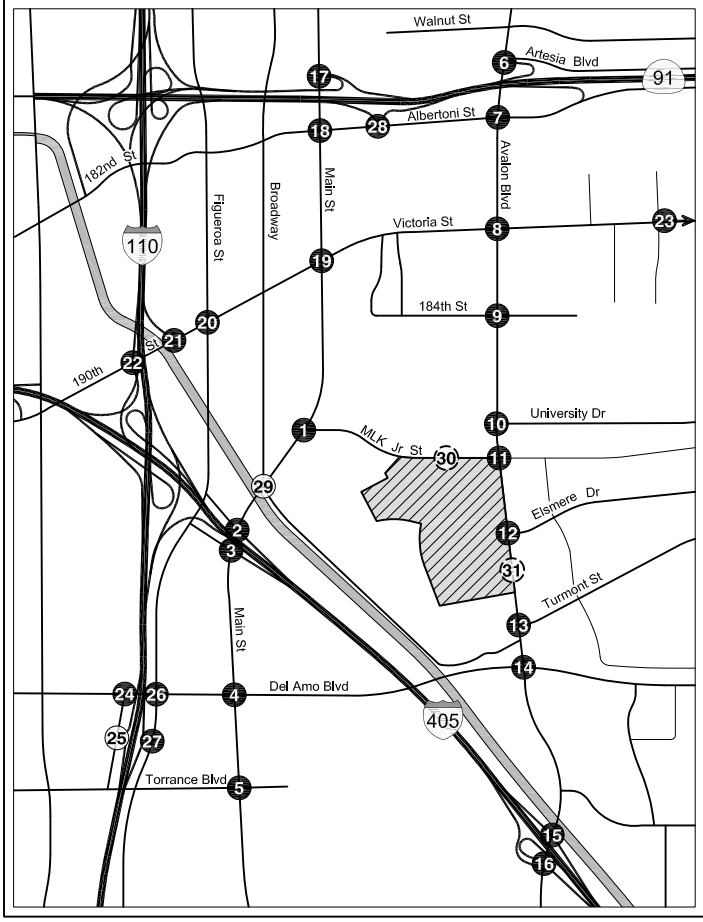
16. Avalon Boulevard & I-405 SB Ramps

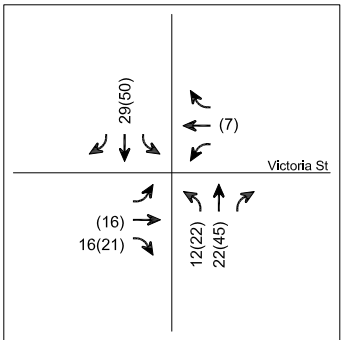


17. Main Street & SR-91 WB Ramps

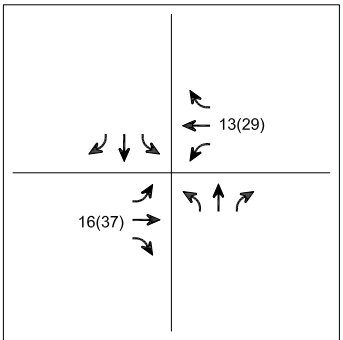


18. Main Street & Albertoni Street





19. Main Street & Victoria Street



20. Figueroa Street & Victoria Street

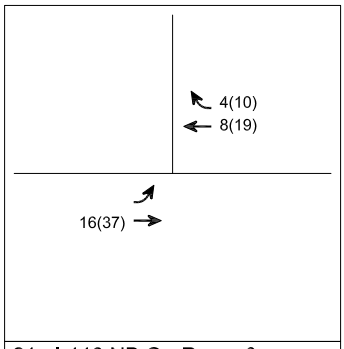
LEGEND

- Project Site
- Signalized Intersection
- Unsignalized Intersection
- Future Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes

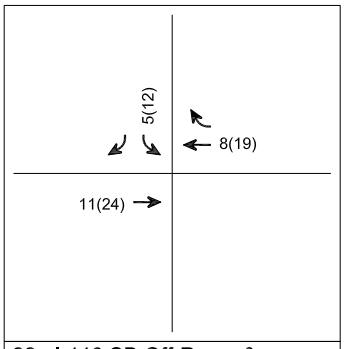
N
Not to Scale

PROJECT-ONLY
WEEKDAY PEAK HOUR TRAFFIC VOLUMES

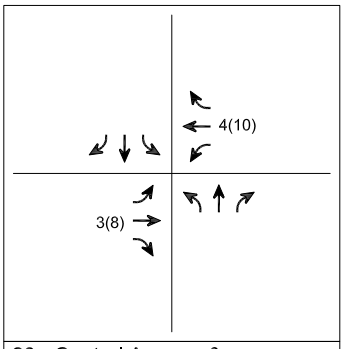
FIGURE
7A (CONT.)



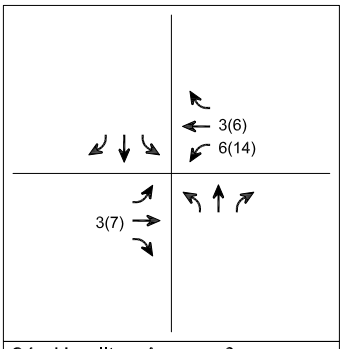
21. I-110 NB On-Ramp & 190th Street



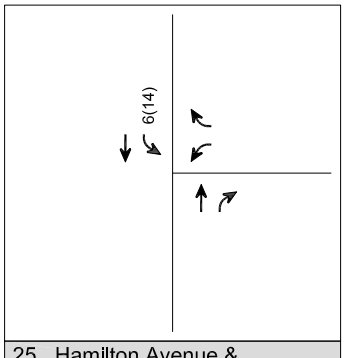
22. I-110 SB Off-Ramp & 190th Street



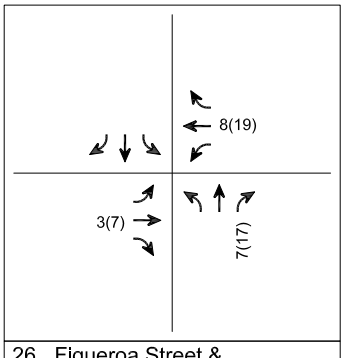
23. Central Avenue & Victoria Street



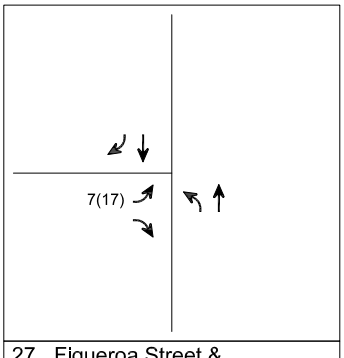
24. Hamilton Avenue & Del Amo Boulevard



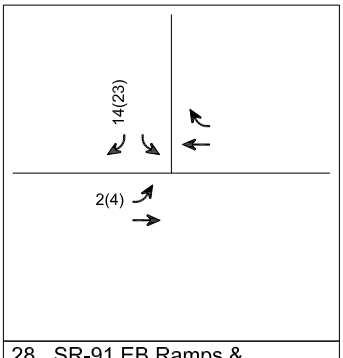
25. Hamilton Avenue & I-110 SB Ramps



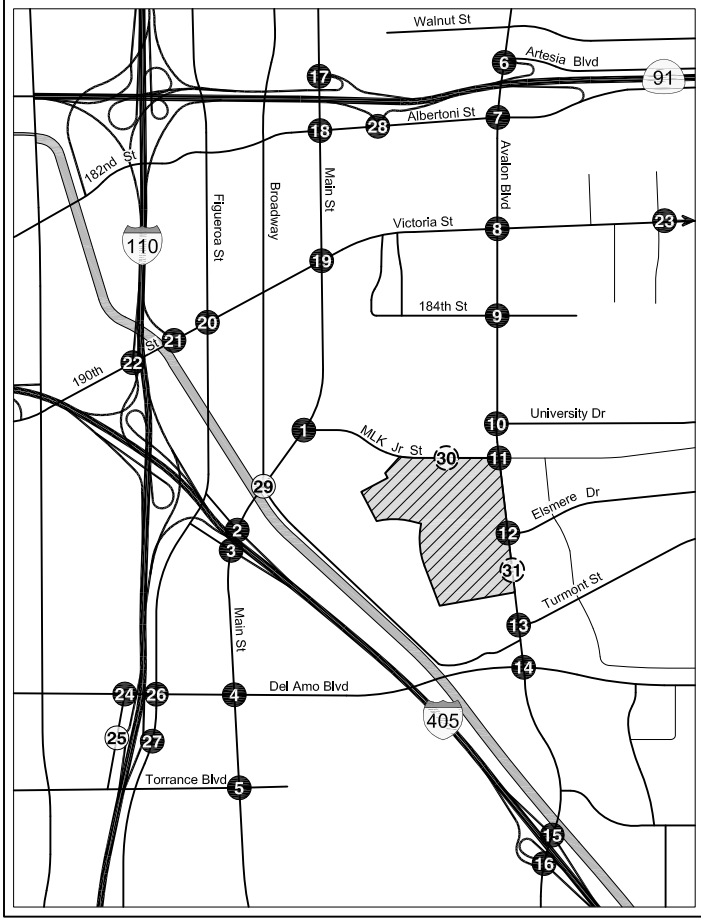
26. Figueroa Street & Del Amo Boulevard

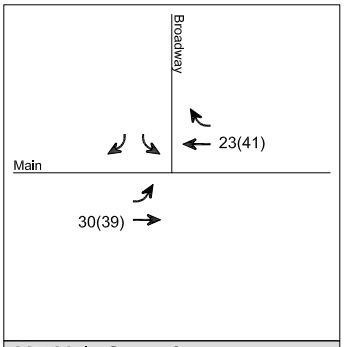


27. Figueroa Street & I-110 NB Ramps

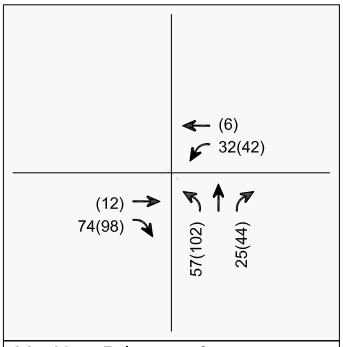


28. SR-91 EB Ramps & Albertoni Street





29. Main Street & Broadway

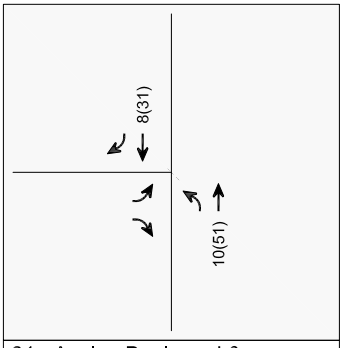


30. New Driveway & Martin Luther King Jr Street

N
Not to Scale

LEGEND

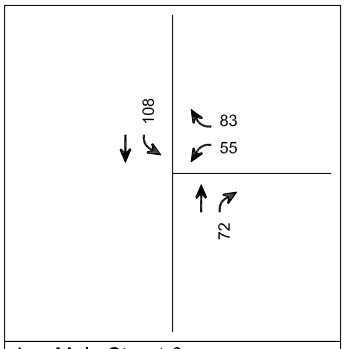
- Project Site
- # Signalized Intersection
- # Unsignalized Intersection
- # Future Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes



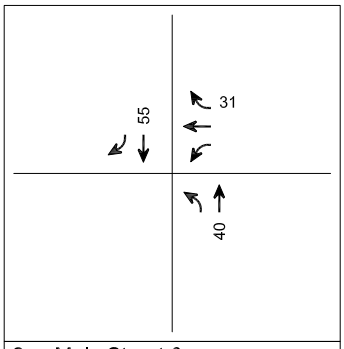
31. Avalon Boulevard & New Driveway

PROJECT-ONLY
WEEKDAY PEAK HOUR TRAFFIC VOLUMES

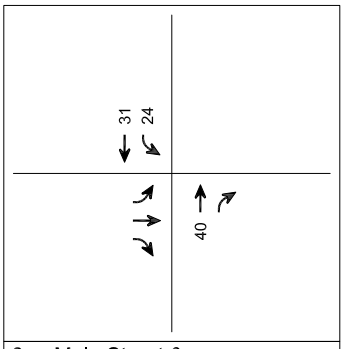
FIGURE
7A (CONT.)



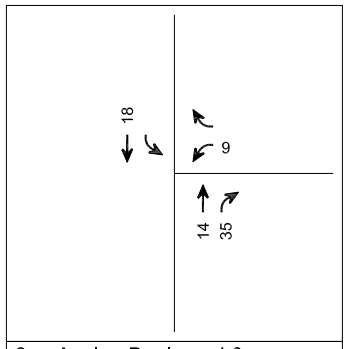
1. Main Street & MLK Jr Street



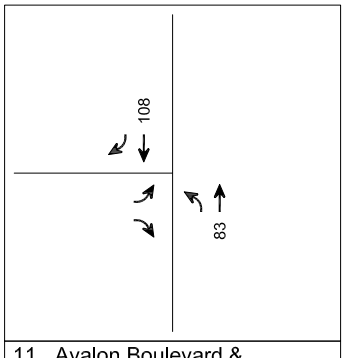
2. Main Street & I-405 NB Off-Ramp



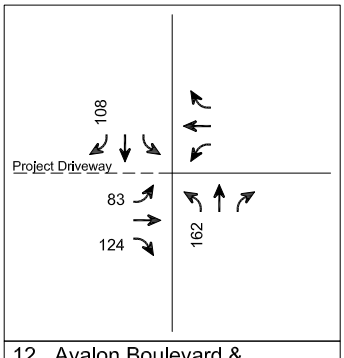
3. Main Street & I-405 SB On-Ramp



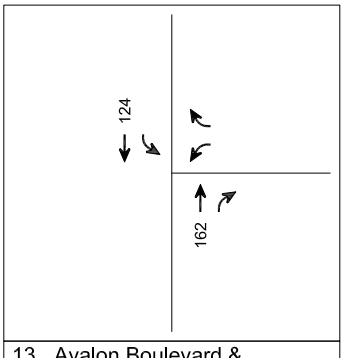
6. Avalon Boulevard & SR-91 WB On-Ramp



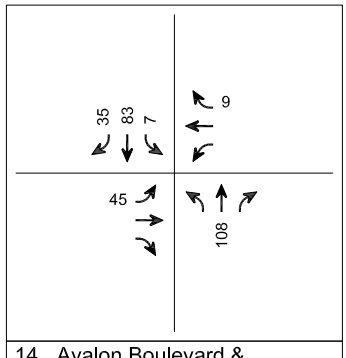
11. Avalon Boulevard & MLK Jr Street



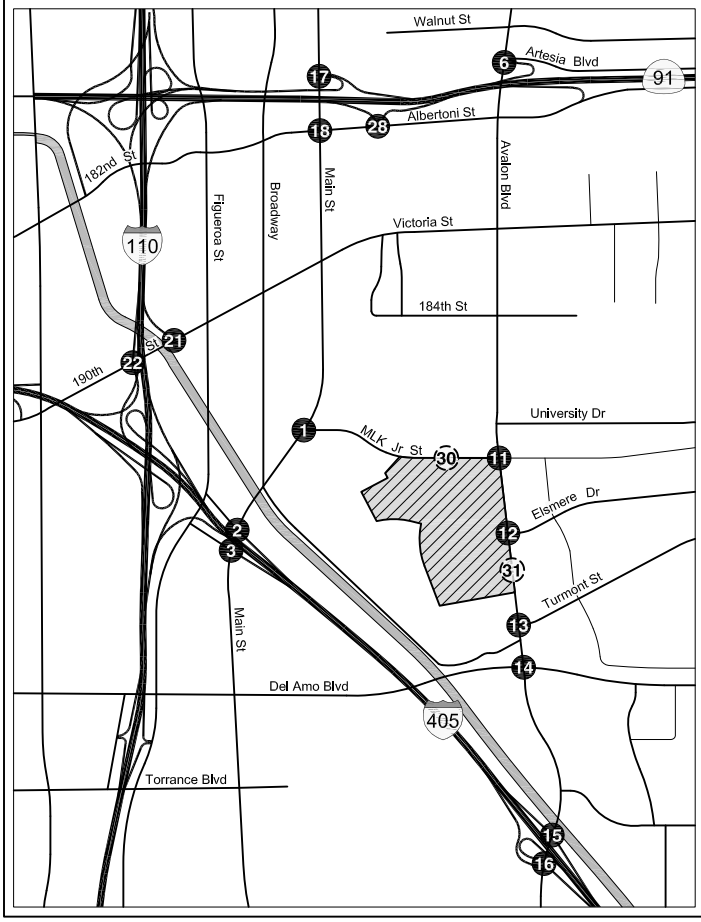
12. Avalon Boulevard & Elsmere Drive

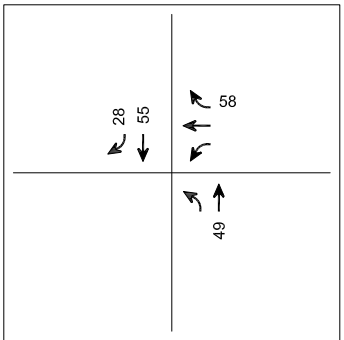


13. Avalon Boulevard & Turmont Street

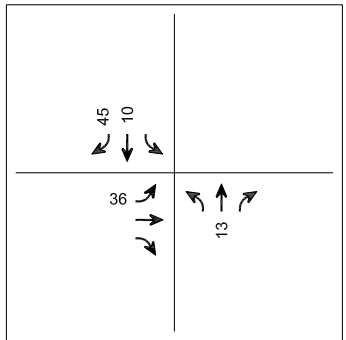


14. Avalon Boulevard & Del Amo Boulevard





15. Avalon Boulevard & I-405 NB Ramps



16. Avalon Boulevard & I-405 SB Ramps

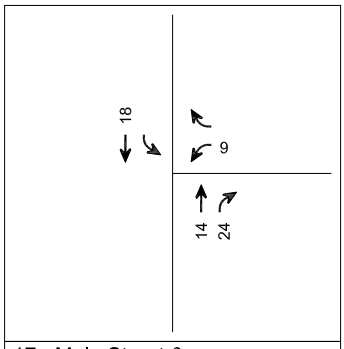
LEGEND

- Project Site
- Signalized Intersection
- Unsignalized Intersection
- Future Intersection
- # Midday Peak Hour Traffic Volumes

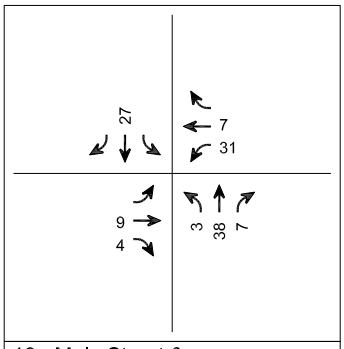
N
Not to Scale

PROJECT-ONLY
SATURDAY PEAK HOUR TRAFFIC VOLUMES

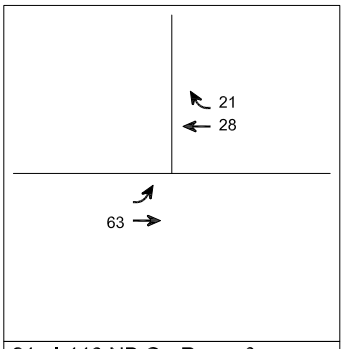
FIGURE 7B



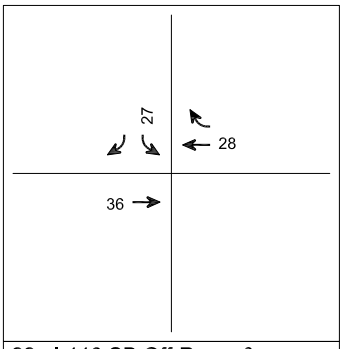
17. Main Street & SR-91 WB Ramps



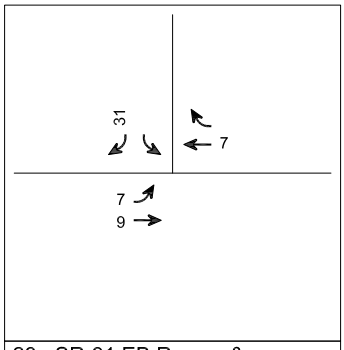
18. Main Street & Albertoni Street



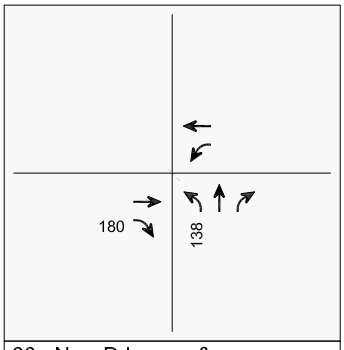
21. I-110 NB On-Ramp & 190th Street



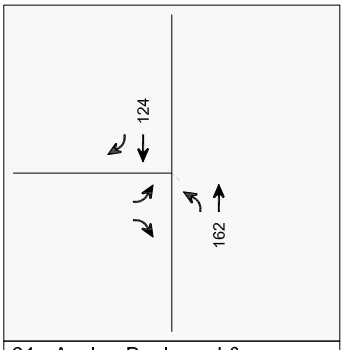
22. I-110 SB Off-Ramp & 190th Street



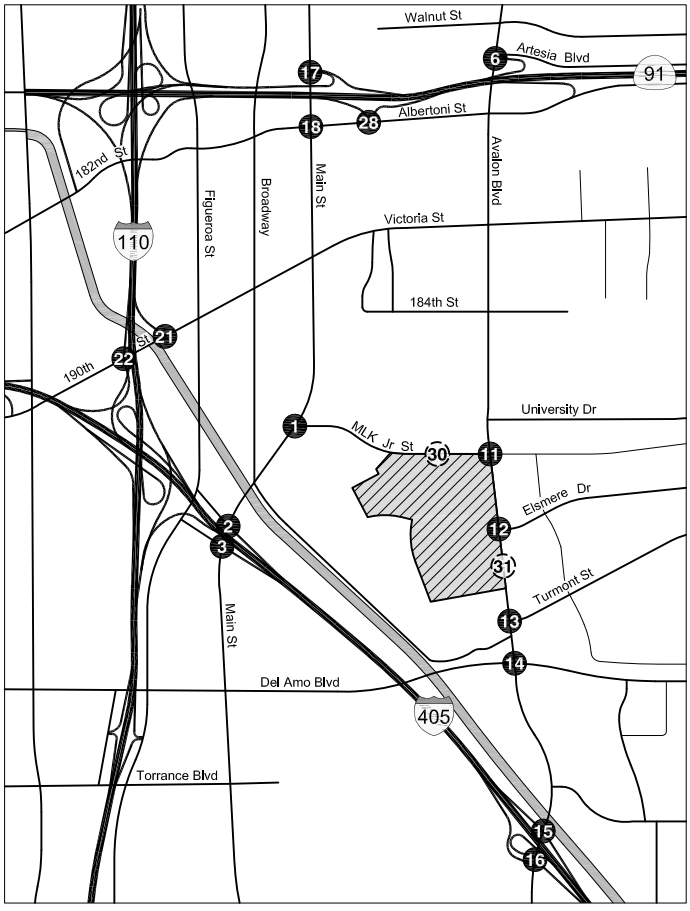
28. SR-91 EB Ramps & Albertoni Street



30. New Driveway & Martin Luther King Jr Street



31. Avalon Boulevard & New Driveway



LEGEND

- Project Site
- Signalized Intersection
- Unsignalized Intersection
- Future Intersection
- # Midday Peak Hour Traffic Volumes

N
Not to Scale

PROJECT-ONLY
SATURDAY PEAK HOUR TRAFFIC VOLUMES

FIGURE
7B (CONT.)

TABLE 6
PROJECT TRIP GENERATION ESTIMATES

TRIP GENERATION RATES [a]													
Land Use	ITE Land Use	Rate	Weekday							Weekend			
			Daily	A.M. Peak Hour			P.M. Peak Hour			Daily	Complex Peak Hour		
				In	Out	Total	In	Out	Total		In	Out	Total
Golf Course [b]	430	per acre	3.74	74%	26%	0.19	34%	66%	0.28	5.82	52%	48%	0.64
General Office Building	710	per ksf	9.74	86%	15%	1.16	16%	84%	1.15	2.21	54%	46%	0.53
Soccer Complex [c]	488	per field	71.33	61%	39%	0.99	66%	34%	16.43	430	59%	41%	54
Recreational Community Center [d]	495	per ksf	28.82	66%	34%	1.76	47%	53%	2.31	9.1	54%	46%	1.07
Tennis Courts [e]	490	per court	30.32	50%	50%	1.67	50%	50%	3.67	27.83	50%	50%	3
Skatepark [f]	[d]	per ksf	9.1	53%	47%	0.3	50%	50%	1.36	16.61	53%	47%	1.86

TRIP GENERATION ESTIMATES												
Land Use	Size	Weekday							Weekend			
		Daily	A.M. Peak Hour			P.M. Peak Hour			Daily	Complex Peak Hour		
			In	Out	Total	In	Out	Total		In	Out	Total
Existing Uses												
Victoria Golf Course	87 Acres	325	12	5	17	8	16	24	506	29	27	56
Subtotal - Existing Uses		***325***	***12***	***5***	***17***	***8***	***16***	***24***	***506***	***29***	***27***	***56***
Proposed Project												
Soccer Complex - ITE Rates / Emprirical	10 fields	713	6	4	10	108	56	164	4,300	319	221	540
Skatepark	43,560 sf	396	7	6	13	30	29	59	724	43	38	81
Tennis Complex [g]	62 courts	1,880	55	54	109	72	71	143	1,725	93	93	186
League Administration Building	5,000 sf	49	5	1	6	1	5	6	11	1	2	3
Learning Center/Development Facility [h]	38,000 sf	1,095	44	23	67	41	47	88	346	22	19	41
Subtotal - Proposed Project		**4,133**	**117**	**88**	**205**	**252**	**208**	**460**	**7,106**	**478**	**373**	**851**
TOTAL NET NEW PROJECT TRIPS		**3,808**	**105**	**83**	**188**	**244**	**192**	**436**	**6,600**	**449**	**346**	**795**

Notes:
[a] Trip generation rates, unless otherwise noted, are from *Trip Generation, 10th Edition* , Institute of Transportation Engineers, 2017.
[b] Weekend trip generation rates for gold course use *Trip Generation, 9th Edition,* Institute of Transportation Engineers, 2012.
[c] Weekday trip generation rates for Land Use 488: Soccer Complex from *Trip Generation, 10th Edition* , Institute of Transportation Engineers, 2017. Weekend trip generation rates based on emperical data taken at Placer Valley Sports Complex, 2015.
[d] Learning center and development facility trips based on ITE Land Use 495 (Recreational Community Center).
[e] Trip generation Rates based on *Trip Generation, 9th Edition* , Institute of Transportation Engineers, 2012. Assumes Weekday AM and PM peak hours have 50% directional distribution.
[f] Trip generation rates from Center Avenue Skatepark found in the City of Huntington Beach Center Avenue Skatepark TIA, published December 2011. Weekend Daily trips were determined based on the ratio of weekday afternoon peak hour trips to weekday daily trips.
[g] Includes Exhabition Court, Spectator Venue, and Tennis Center Courts.
[h] The Learning Center is anticipated to operate based on a fixed number of daily sessions with students primarily transported by bus.

Chapter 4
Existing with Project Conditions

This chapter describes the results of the analysis of intersection operating conditions associated with the Project when compared to Existing Conditions. The analysis corresponds with the Existing Conditions data and analysis presented in Chapter 2. The Existing with Project Conditions are defined by the traffic volumes, roadways, and intersection configurations that existed at the time of the NOP.

EXISTING WITH PROJECT TRAFFIC VOLUMES

Consistent with the LACDPW analysis guidelines for Project impact analysis, the Project-only weekday morning, weekday midday, weekday afternoon, and Saturday midday peak hour traffic volumes described in Chapter 3 and shown in Figures 7A and 7B were added to the Existing weekday morning and afternoon and Saturday midday peak hour traffic volumes shown in Figures 4A and 4B.

The resulting volumes are illustrated in Figures 8A and 8B. They represent Existing with Project Conditions after development of the Project under Existing Conditions.

EXISTING WITH PROJECT INTERSECTION LEVELS OF SERVICE

Table 8A summarizes the results of the Existing with Project Conditions during the weekday morning and afternoon peak hours; the Saturday midday peak hour is summarized in Table 8B. As shown, 29 of the 31 study intersections are projected to operate at LOS D or better during the analyzed weekday peak hours. Avalon Boulevard & Del Amo Boulevard (Intersection #14) and Hamilton Avenue & I-110 Southbound Ramps (Intersection #25) are projected to operate at LOS E or F during at least one of the analyzed peak hours. Under Existing with Project

weekend conditions, as shown in Table 7B, each of the 15 study intersections is projected to continue operating at LOS A or LOS B during the Saturday mid-day peak hour.

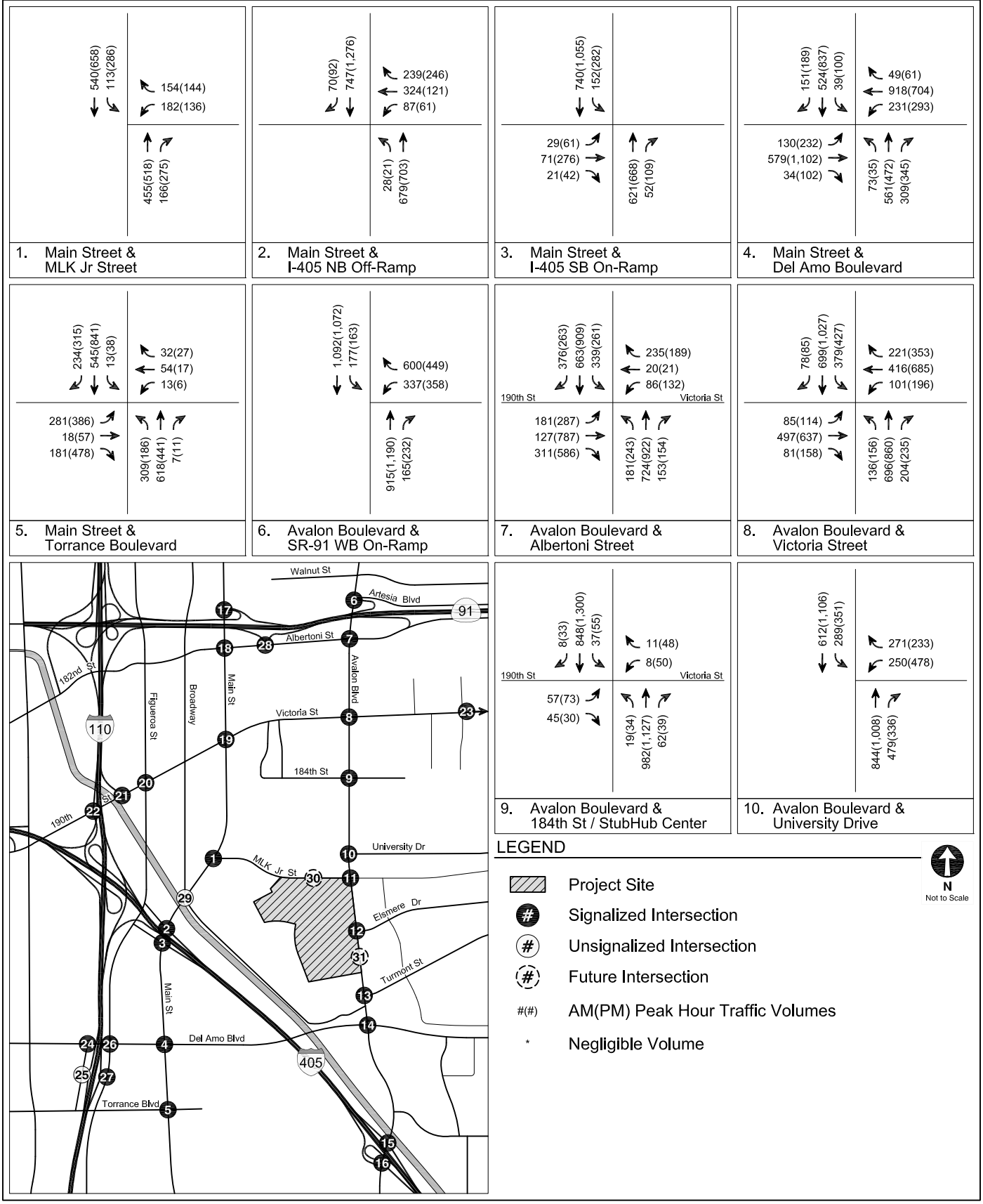
IMPACT ANALYSIS

As detailed in Tables 7A and 7B, when measuring the Existing with Project Conditions against Existing Conditions, the incremental increases in the V/C ratios resulting from Project traffic would exceed the thresholds of the LACDPW significant impact criteria at three of the 31 study intersections under Existing with Project Conditions on weekdays with no significant impacts projected during the Saturday mid-day. These impacted weekday intersections include:

7. Avalon Boulevard & Albertoni Street (afternoon peak hour)
18. Main Street & Albertoni Street (afternoon peak hour)
19. Main Street & Victoria Street (afternoon peak hour)

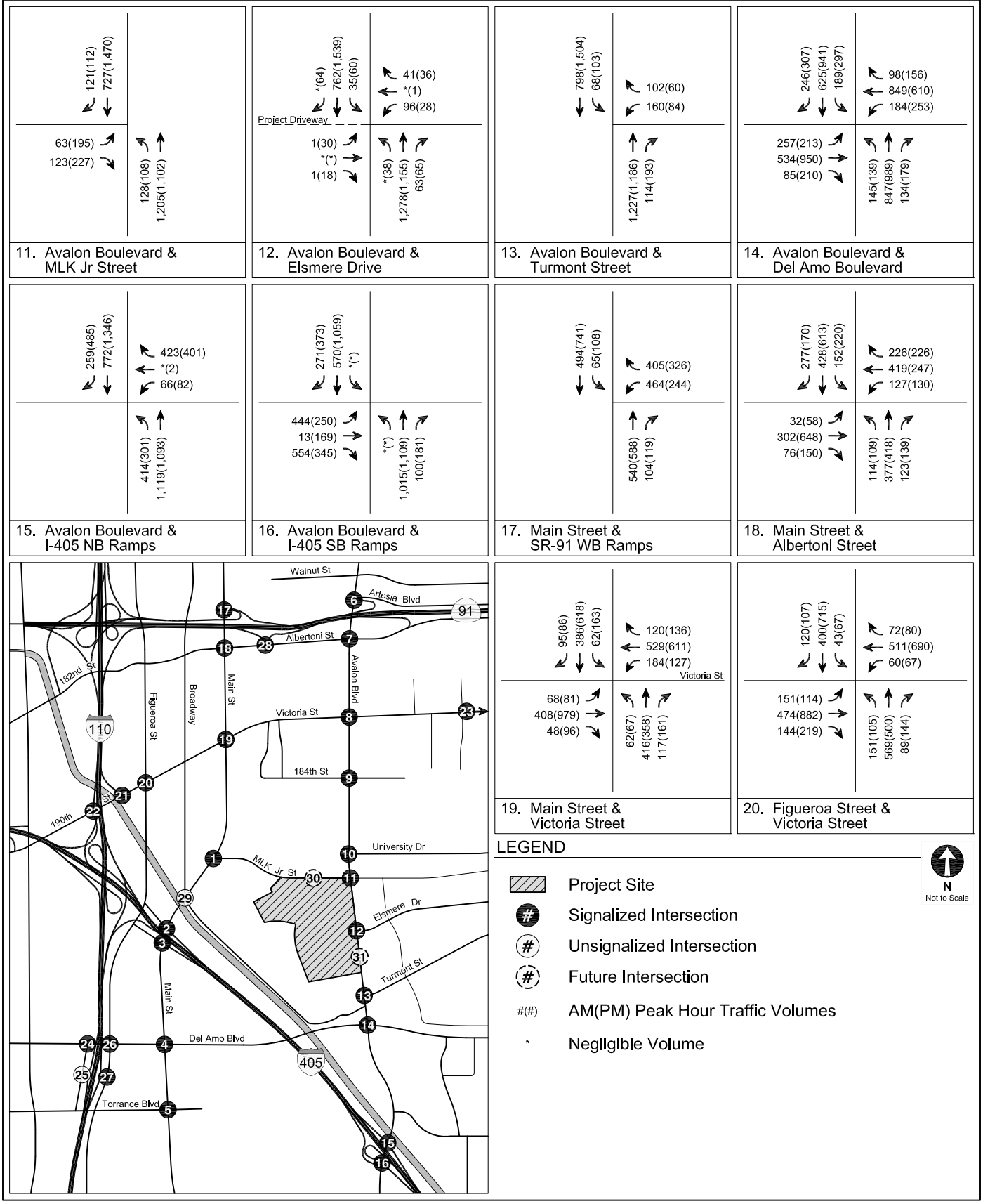
In addition, based on the signal warrant analysis performed and described in Chapter 6, Hamilton Avenue & I-110 Southbound Ramps (Intersection #25) was identified as potentially significantly impacted under Existing with Project Conditions.

The measures proposed to mitigate the Project impacts are described in Chapter 7.



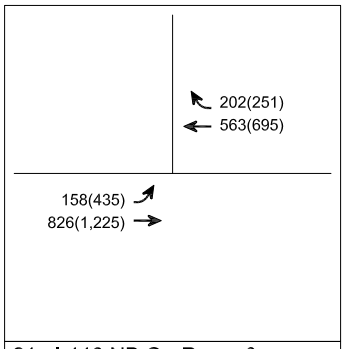
EXISTING WITH PROJECT CONDITIONS (YEAR 2018)
WEEKDAY PEAK HOUR TRAFFIC VOLUMES

FIGURE 8A

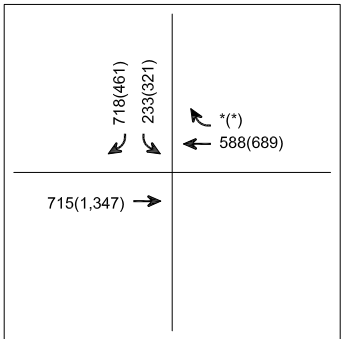


EXISTING WITH PROJECT CONDITIONS (YEAR 2018)
WEEKDAY PEAK HOUR TRAFFIC VOLUMES

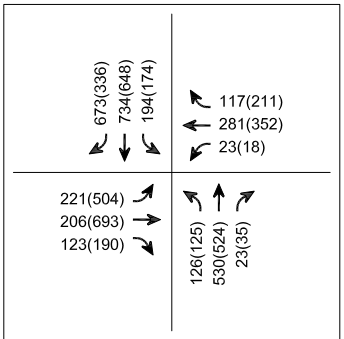
FIGURE 8A (CONT.)



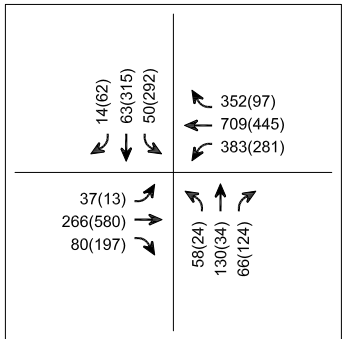
21. I-110 NB On-Ramp & 190th Street



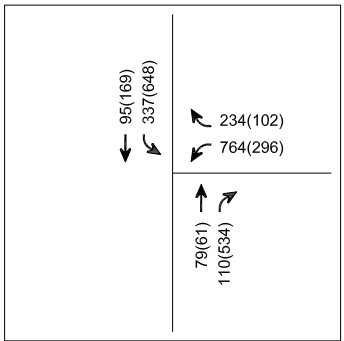
22. I-110 SB Off-Ramp & 190th Street



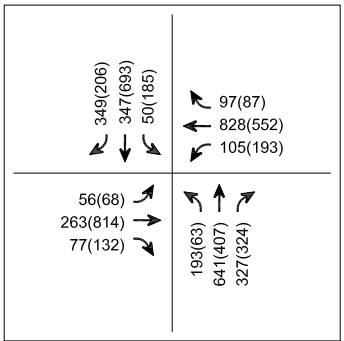
23. Central Avenue & Victoria Street



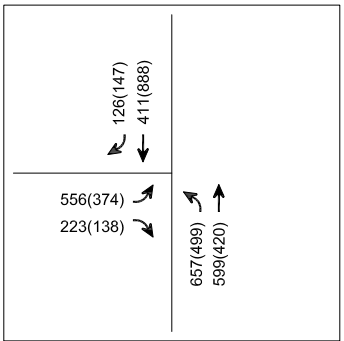
24. Hamilton Avenue & Del Amo Boulevard



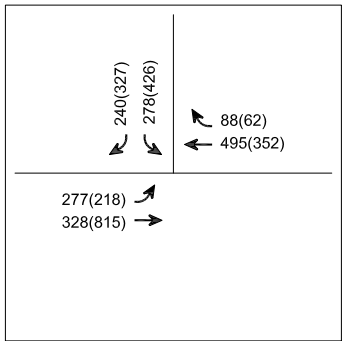
25. Hamilton Avenue & I-110 SB Ramps



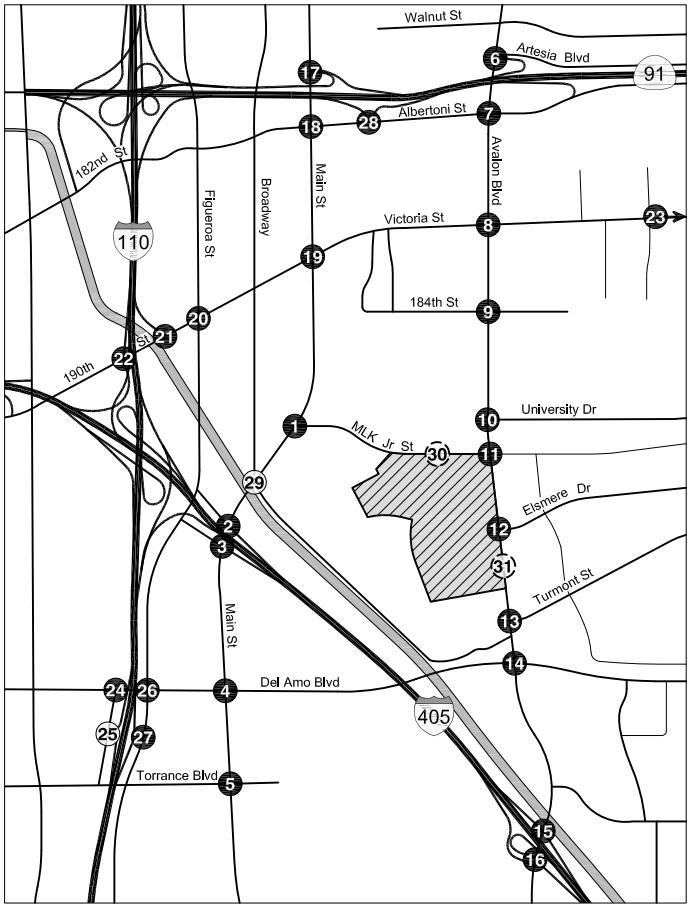
26. Figueroa Street & Del Amo Boulevard

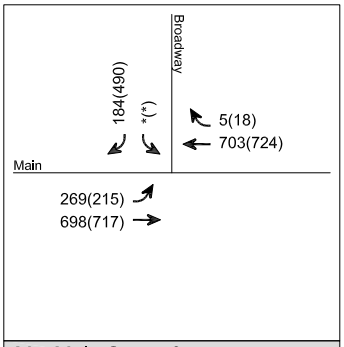


27. Figueroa Street & I-110 NB Ramps

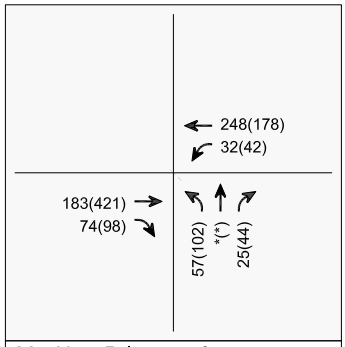


28. SR-91 EB Ramps & Albertoni Street





29. Main Street & Broadway

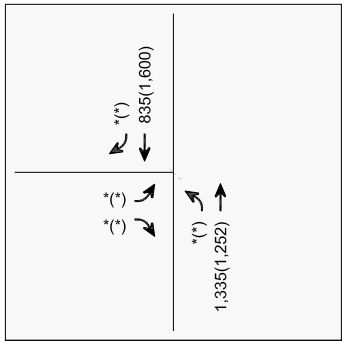


30. New Driveway & Martin Luther King Jr Street

N
Not to Scale

LEGEND

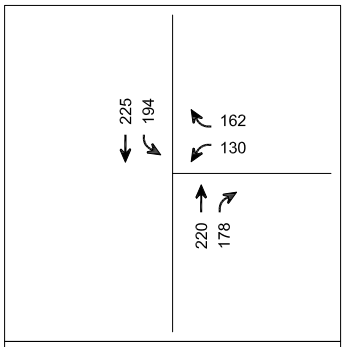
- Project Site
- # Signalized Intersection
- # Unsignalized Intersection
- # Future Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes
- * Negligible Volume



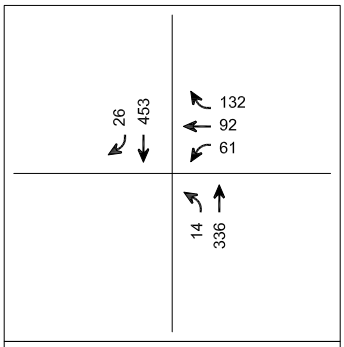
31. Avalon Boulevard & New Driveway

EXISTING WITH PROJECT CONDITIONS (YEAR 2018)
WEEKDAY PEAK HOUR TRAFFIC VOLUMES

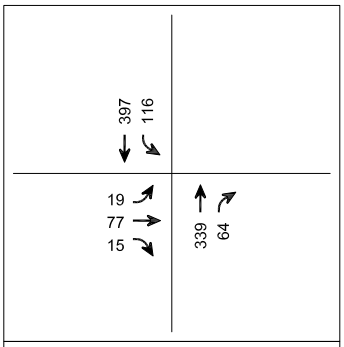
FIGURE 8A (CONT.)



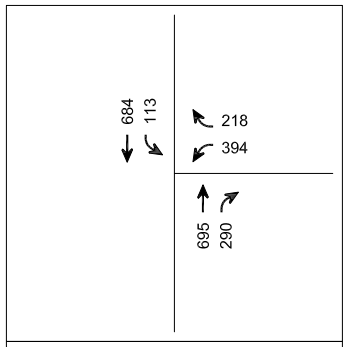
1. Main Street & MLK Jr Street



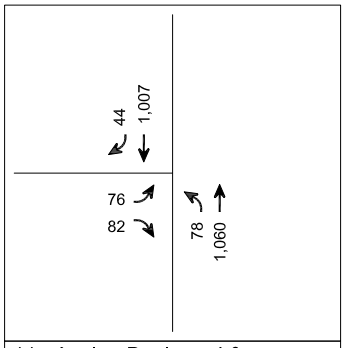
2. Main Street & I-405 NB Off-Ramp



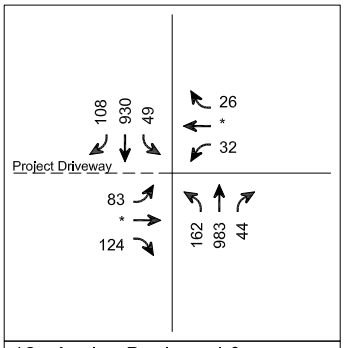
3. Main Street & I-405 SB On-Ramp



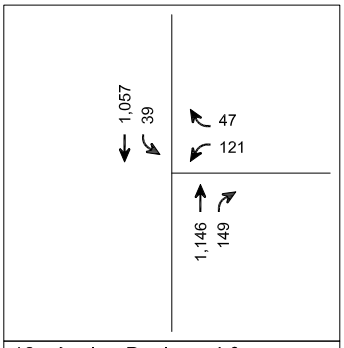
6. Avalon Boulevard & SR-91 WB On-Ramp



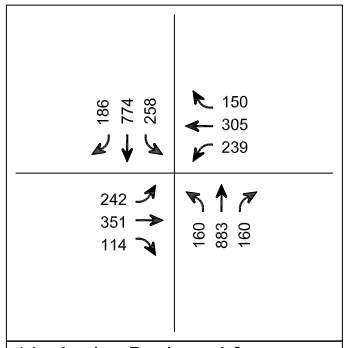
11. Avalon Boulevard & MLK Jr Street



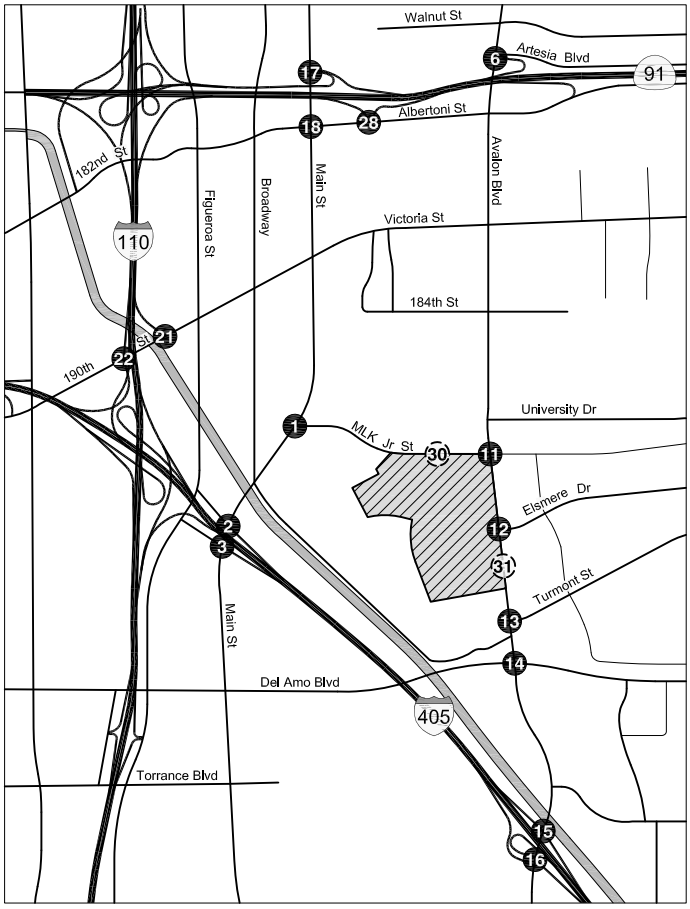
12. Avalon Boulevard & Elsmere Drive

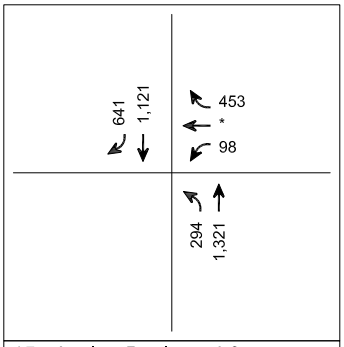


13. Avalon Boulevard & Turmont Street

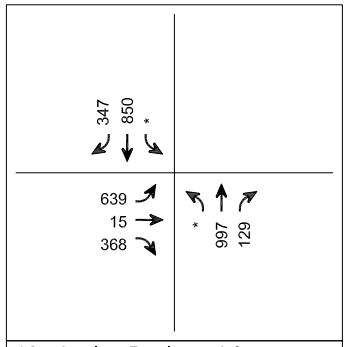


14. Avalon Boulevard & Del Amo Boulevard





15. Avalon Boulevard & I-405 NB Ramps



16. Avalon Boulevard & I-405 SB Ramps

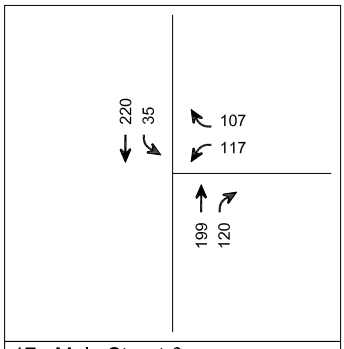
LEGEND

- Project Site
- Signalized Intersection
- Unsignalized Intersection
- Future Intersection
- # Midday Peak Hour Traffic Volume
- * Negligible Volume

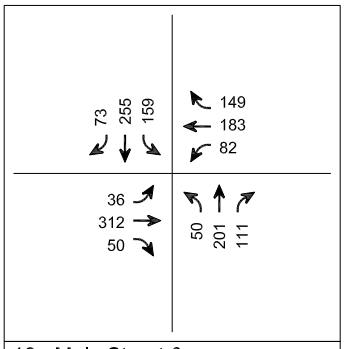
N
Not to Scale

EXISTING WITH PROJECT CONDITIONS (YEAR 2018)
SATURDAY PEAK HOUR TRAFFIC VOLUMES

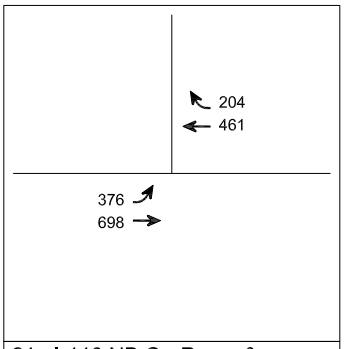
FIGURE 8B



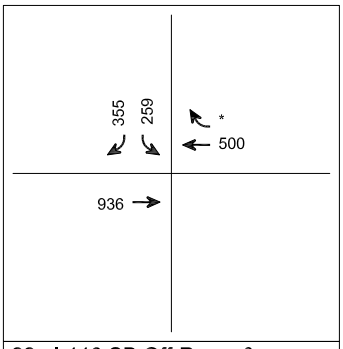
17. Main Street & SR-91 WB Ramps



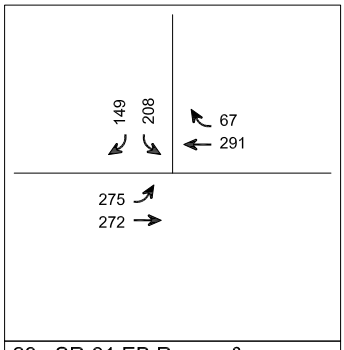
18. Main Street & Albertoni Street



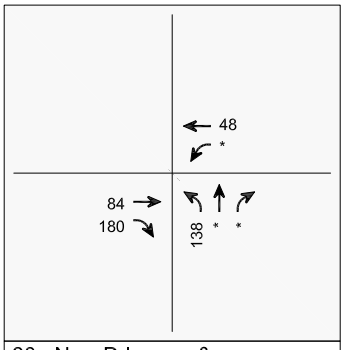
21. I-110 NB On-Ramp & 190th Street



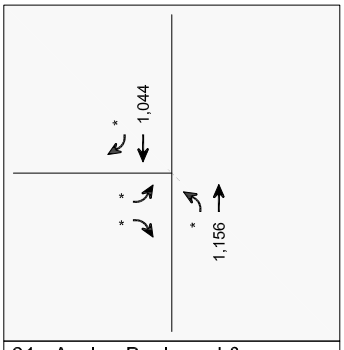
22. I-110 SB Off-Ramp & 190th Street



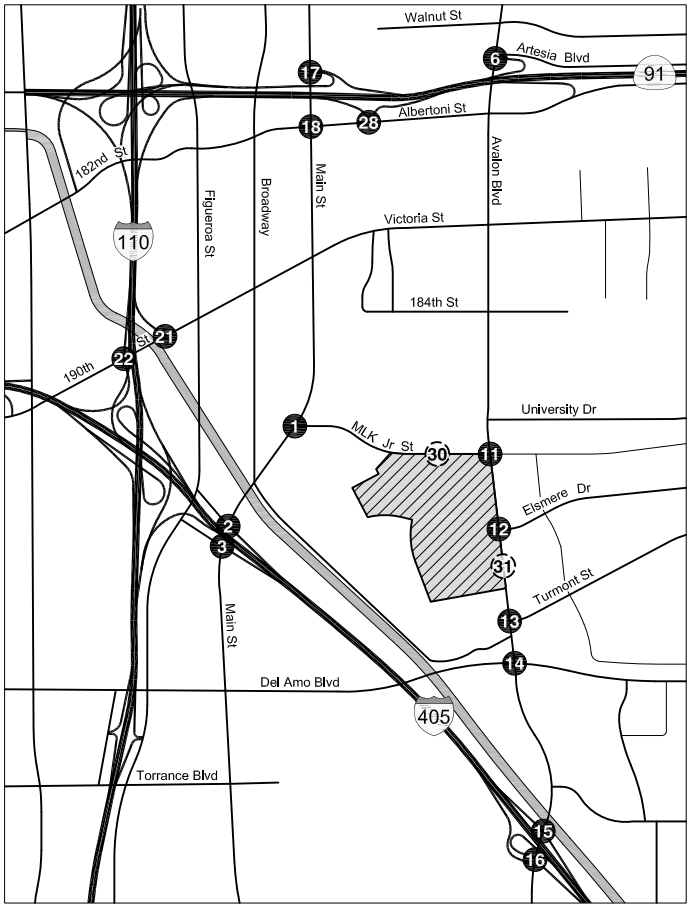
28. SR-91 EB Ramps & Albertoni Street



30. New Driveway & Martin Luther King Jr Street



31. Avalon Boulevard & New Driveway



LEGEND

- Project Site
- # Signalized Intersection
- # Unsignalized Intersection
- # Future Intersection
- # Midday Peak Hour Traffic Volume
- * Negligible Volume

N
Not to Scale

EXISTING WITH PROJECT CONDITIONS (YEAR 2018)
SATURDAY PEAK HOUR TRAFFIC VOLUMES

FIGURE
8B (CONT.)

TABLE 7A
EXISTING WITH PROJECT CONDITIONS (YEAR 2018) - WEEKDAY
INTERSECTION PEAK HOUR LEVELS OF SERVICE

No.	Signalized Intersection	Peak Hour	Existing Conditions (Year 2018)		Existing with Project Conditions (Year 2018)			
			V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	Change in V/C Ratio	Significant Impact? [a]
1.	Main Street & MLK Jr Street	AM	0.415	A	0.471	A	0.056	NO
		PM	0.524	A	0.617	B	0.093	NO
2.	Main Street & I-405 NB Off-Ramp	AM	0.567	A	0.576	A	0.009	NO
		PM	0.675	B	0.694	B	0.019	NO
3.	Main Street & I-405 SB On-Ramp	AM	0.452	A	0.463	A	0.011	NO
		PM	0.702	C	0.718	C	0.016	NO
4.	Main Street & Del Amo Boulevard	AM	0.665	B	0.679	B	0.014	NO
		PM	0.864	D	0.876	D	0.012	NO
5.	Main Street & Torrance Boulevard	AM	0.622	B	0.626	B	0.004	NO
		PM	0.754	C	0.757	C	0.003	NO
6.	Avalon Boulevard & SR-91 WB On-Ramp	AM	0.546	A	0.547	A	0.001	NO
		PM	0.570	A	0.573	A	0.003	NO
7.	Avalon Boulevard & Albertoni Street	AM	0.647	B	0.649	B	0.002	NO
		PM	0.843	D	0.865	D	0.022	YES
8.	Avalon Boulevard & Victoria Street	AM	0.590	A	0.595	A	0.005	NO
		PM	0.736	C	0.751	C	0.015	NO
9.	Avalon Boulevard & 184th Street-StubHub Center Gate	AM	0.392	A	0.395	A	0.003	NO
		PM	0.469	A	0.484	A	0.015	NO
10.	Avalon Boulevard & University Drive	AM	0.667	B	0.669	B	0.002	NO
		PM	0.723	C	0.731	C	0.008	NO
11.	Avalon Boulevard & MLK Jr Street	AM	0.418	A	0.434	A	0.016	NO
		PM	0.592	A	0.639	B	0.047	NO
12.	Avalon Boulevard & Elsmere Drive	AM	0.459	A	0.461	A	0.002	NO
		PM	0.435	A	0.500	A	0.065	NO
13.	Avalon Boulevard & Turmont Street	AM	0.520	A	0.522	A	0.002	NO
		PM	0.494	A	0.504	A	0.010	NO
14.	Avalon Boulevard & Del Amo Boulevard	AM	0.797	C	0.798	C	0.001	NO
		PM	0.897	D	0.902	E	0.005	NO
15.	Avalon Boulevard & I-405 NB Ramps	AM	0.470	A	0.470	A	0.000	NO
		PM	0.508	A	0.511	A	0.003	NO
16.	Avalon Boulevard & I-405 SB Ramps	AM	0.602	B	0.603	B	0.001	NO
		PM	0.586	A	0.590	A	0.004	NO
17.	Main Street & SR-91 WB Ramps	AM	0.624	B	0.632	B	0.008	NO
		PM	0.581	A	0.592	A	0.011	NO
18.	Main Street & Albertoni Street	AM	0.688	B	0.698	B	0.010	NO
		PM	0.814	D	0.849	D	0.035	YES
19.	Main Street & Victoria Street	AM	0.525	A	0.547	A	0.022	NO
		PM	0.736	C	0.777	C	0.041	YES
20.	Figueroa Street & Victoria Street	AM	0.605	B	0.609	B	0.004	NO
		PM	0.692	B	0.707	C	0.015	NO
21.	I-110 NB On-Ramp & 190th Street	AM	0.353	A	0.358	A	0.005	NO
		PM	0.471	A	0.483	A	0.012	NO
22.	I-110 SB Off-Ramp & 190th Street	AM	0.769	C	0.772	C	0.003	NO
		PM	0.802	D	0.809	D	0.007	NO
23.	Central Avenue & Victoria Street	AM	0.799	C	0.800	C	0.001	NO
		PM	0.736	C	0.739	C	0.003	NO
24.	Hamilton Avenue & Del Amo Blvd	AM	0.546	A	0.547	A	0.001	NO
		PM	0.768	C	0.778	C	0.010	NO
25 [b].	Hamilton Avenue & I-110 SB Ramps	AM	40.0	E	40.6	E	0.6	[d]
		PM	81.8	F	86.7	F	4.9	[d]
[c]		AM	0.668	B	0.672	B	0.004	[d]
		PM	0.659	B	0.668	B	0.009	[d]
26.	Figueroa Street & Del Amo Boulevard	AM	0.730	C	0.733	C	0.003	NO
		PM	0.822	D	0.834	D	0.012	NO
27.	Figueroa Street & I-110 NB Ramps	AM	0.698	B	0.700	B	0.002	NO
		PM	0.705	C	0.711	C	0.006	NO
28.	SR-91 EB Ramps & Albertoni Street	AM	0.551	A	0.552	A	0.001	NO
		PM	0.621	B	0.621	B	0.000	NO
29 [b].	Main Street & Broadway	AM	17.8	C	18.4	C	0.6	NO
		PM	17.1	C	18.0	C	0.9	NO
30.	New driveway & MLK Jr Street	AM	New Intersection		0.291	A	-	N/A
		PM			0.453	A	-	N/A
31.	Avalon Boulevard & New driveway	AM	New Intersection		0.378	A	-	N/A
		PM			0.433	A	-	N/A

AM - Weekday AM Peak Hour, PM - Weekday PM Peak Hour
[a] Significance based on County of Los Angeles Standards
[b] A signal warrant was performed to determine significant impacts for unsignalized intersections
[c] Due to the shared jurisdiction, the intersection was analyzed using both HCM (Caltrans) and ICU (LACDPW) methodology
[d] Warrants were met under Existing, Existing with Project, and Future with Project Conditions

TABLE 7B
EXISTING WITH PROJECT CONDITIONS (YEAR 2018) - SATURDAY
INTERSECTION PEAK HOUR LEVELS OF SERVICE

No.	Signalized Intersection	Peak Hour	Existing Conditions (Year 2018)		Existing with Project Conditions (Year 2018)			
			V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	Change in V/C Ratio	Significant Impact? [a]
1.	Main Street & MLK Jr Street	MD	0.303	A	0.447	A	0.144	NO
2.	Main Street & I-405 NB Off-Ramp	MD	0.321	A	0.347	A	0.026	NO
3.	Main Street & I-405 SB On-Ramp	MD	0.328	A	0.356	A	0.028	NO
6.	Avalon Boulevard & SR-91 WB On-Ramp	MD	0.424	A	0.448	A	0.024	NO
11.	Avalon Boulevard & MLK Jr Street	MD	0.396	A	0.419	A	0.023	NO
12.	Avalon Boulevard & Elsmere Drive	MD	0.365	A	0.515	A	0.15	NO
13.	Avalon Boulevard & Turmont Street	MD	0.436	A	0.47	A	0.034	NO
14.	Avalon Boulevard & Del Amo Boulevard	MD	0.634	B	0.659	B	0.025	NO
15.	Avalon Boulevard & I-405 NB Ramps	MD	0.528	A	0.543	A	0.015	NO
16.	Avalon Boulevard & I-405 SB Ramps	MD	0.657	B	0.674	B	0.017	NO
17.	Main Street & SR-91 WB Ramps	MD	0.277	A	0.295	A	0.018	NO
18.	Main Street & Albertoni Street	MD	0.424	A	0.464	A	0.04	NO
21.	I-110 NB On-Ramp & 190th Street	MD	0.353	A	0.362	A	0.009	NO
22.	I-110 SB Off-Ramp & 190th Street	MD	0.603	B	0.614	B	0.011	NO
28	SR-91 EB Ramps & Albertoni Street	MD	0.433	A	0.437	A	0.004	NO
30.	New driveway & MLK Jr Street	MD	New Intersection		0.299	A	-	N/A
31.	AvalonBoulevard & New driveway	MD	New Intersection		0.341	A	-	N/A

MD - Saturday Midday Peak Hour
[a] Significance based on County of Los Angeles Standards

Chapter 5
Future with Project Conditions

This chapter describes the evaluation of the Project traffic on future cumulative traffic conditions (Future with Project Conditions). The analysis year of 2020 corresponds with the anticipated buildout year of the Project. Consistent with LACDPW analysis guidelines, the cumulative traffic of related projects was identified for the development of the Future Conditions.

FUTURE TRAFFIC VOLUMES

Related projects within a 1.5 mile radius of the Project site were researched for inclusion into this analysis. Due to the location of the Project site, this research included multiple jurisdictions including the Los Angeles County Department of Regional Planning for the unincorporated areas of Los Angeles County, as well as the Cities of Carson, Gardena, Los Angeles, and Torrance. Based on that research, a total of nine related projects were identified. The locations of the related projects are illustrated in Figure 9.

Trip Generation

Trip generation estimates for the related projects were provided by the respective jurisdiction or were calculated using a combination of previous study findings and the trip generation rates contained in *Trip Generation, 10th Edition*. Table 8 summarizes the locations, description, and trip generation estimates of the related projects. The related projects are anticipated to generate a total of 37,703 daily trips, along with 1,843 morning peak hour and 3,162 afternoon peak hour trips. On Saturday, approximately 3,818 mid-day peak hour trips are estimated.

Trip Distribution

The geographic distribution of the traffic generated by the related projects is dependent on several factors. These include the type and density of the proposed land uses, the geographic distribution of the population from which the employees/residents and potential patrons of the proposed developments are drawn, and the location of these projects in relation to the surrounding street system. These factors are considered along with logical travel routes through the street system to develop a reasonable pattern of trip distribution.

Trip Assignment

The trip generation estimates for the related projects were assigned to the local street system using the trip distribution pattern described above or as provided in a previous study. Figures 10A and 10B illustrates the peak hour traffic volumes associated with these related projects at the study intersections.

FUTURE WITH PROJECT TRAFFIC VOLUMES

The related project traffic volumes illustrated in Figures 10A and 10B were added to the Existing with Project Conditions traffic volumes illustrated in Figures 8A and 8B; the resulting volumes are illustrated in Figures 11A and 11B. These traffic volumes represent the Future with Project Conditions after development of the Project in year 2020.

FUTURE WITH PROJECT INTERSECTION LEVELS OF SERVICE

Table 9A summarizes the intersection LOS of the Future with Project Conditions during the weekday morning and afternoon peak hours. As shown, 23 of the 31 study intersections are projected to operate at LOS D or better during all analyzed peak hours. The remaining eight intersections are projected to operate at LOS E or F during at least one of the analyzed peak hours. Under Future with Project weekend conditions, as shown in Table 9B, the results of the analysis indicated that 15 of the 17 study intersections are projected to operate at LOS D or

better during the Saturday mid-day period, with the two remaining intersections operating at LOS F during the mid-day period. The intersections projected to operate at LOS E or LOS F include:

4. Main Street & Del Amo Boulevard (weekday afternoon peak hour)
7. Avalon Boulevard & Albertoni Street (weekday afternoon peak hour)
14. Avalon Boulevard & Del Amo Boulevard (weekday morning and afternoon, Saturday mid-day peak hours)
16. Avalon Boulevard & I-405 Southbound Ramps (Saturday mid-day peak hour)
18. Main Street & Albertoni Street (weekday afternoon peak hour)
19. Main Street & Victoria Street (weekday afternoon peak hour)
24. Hamilton Avenue & Del Amo Boulevard (weekday afternoon peak hour)
25. Hamilton Avenue & I-110 Southbound Ramps (weekday morning and afternoon peak hours)
26. Figueroa Street & Del Amo Boulevard (weekday afternoon peak hour)

IMPACT ANALYSIS

As detailed in Tables 9A and 9B, when measuring the Future with Project Conditions against the Existing Conditions, the incremental increases in the V/C ratios resulting from the addition of cumulative traffic would exceed the thresholds of the LACDPW significant impact criteria at a total of 12 intersections during weekday peak hours, including the four intersections identified as potentially significantly impacted under the Existing with Project Conditions. The impacted intersections include:

1. Main Street & Martin Luther King, Jr. Street (weekday afternoon peak hour)
3. Main Street & I-405 Southbound on-ramp (weekday afternoon peak hour)
4. Main Street & Del Amo Boulevard (morning and weekday afternoon peak hours)
7. Avalon Boulevard & Albertoni Street (weekday afternoon peak hour)
8. Avalon Boulevard & Victoria Street (weekday afternoon peak hour)

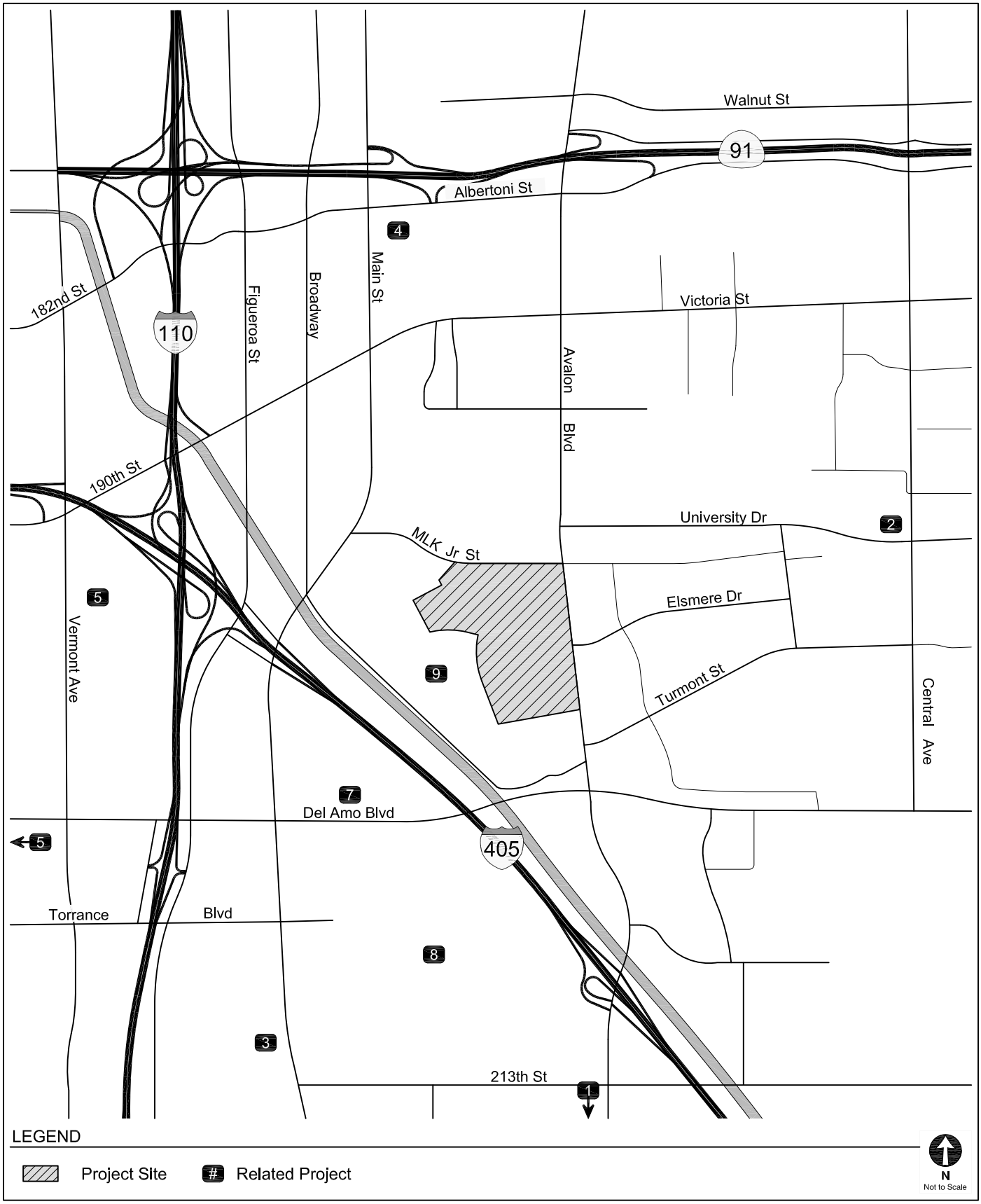
10. Avalon Boulevard & University Drive (weekday afternoon peak hour)
14. Avalon Boulevard & Del Amo Boulevard (weekday morning and afternoon peak hours)
18. Main Street & Albertoni Street (weekday afternoon peak hour)
19. Main Street & Victoria Street (weekday afternoon peak hour)
22. I-110 Southbound off-ramp & 190th Street (weekday afternoon peak hour)
24. Hamilton Avenue & Del Amo Boulevard (weekday afternoon peak hour)
26. Figueroa Street & Del Amo Boulevard (weekday afternoon peak hour)

In addition, based on the signal warrant analysis performed in Chapter 6, Hamilton Avenue & I-110 Southbound Ramps (Intersection #25) is identified as potentially significantly impacted under Future with Project Conditions.

During the Saturday mid-day, under Future with Project Conditions, three intersections are projected to be significantly impacted based on LACDPW impact criteria (including one intersection not identified in the weekday analysis):

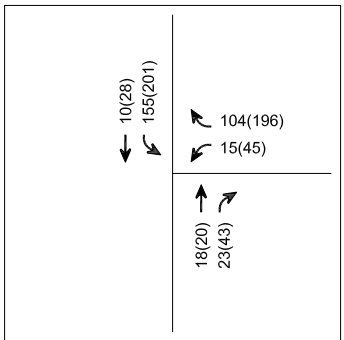
1. Main Street & Martin Luther King, Jr. Street
14. Avalon Boulevard & Del Amo Boulevard
16. Avalon Boulevard & I-405 Southbound Ramps

The measures proposed to mitigate the Project's contribution to potential weekday and Saturday cumulative impacts are described in Chapter 7.

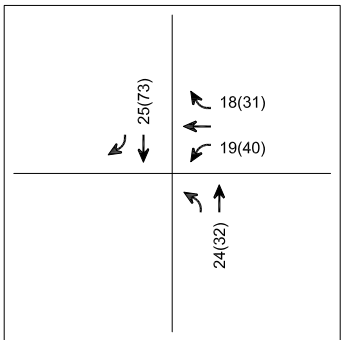


LOCATIONS OF RELATED PROJECTS

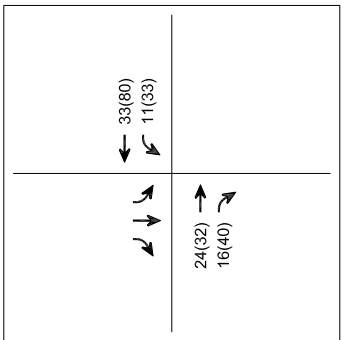
FIGURE 9



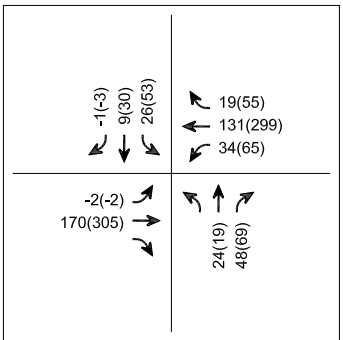
1. Main Street & MLK Jr Street



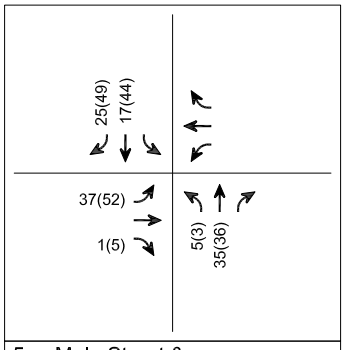
2. Main Street & I-405 NB Off-Ramp



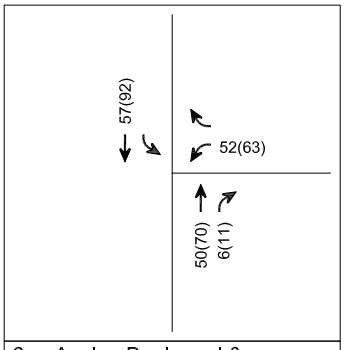
3. Main Street & I-405 SB On-Ramp



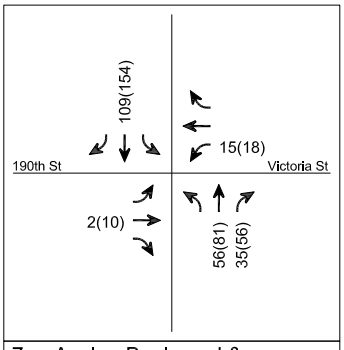
4. Main Street & Del Amo Boulevard



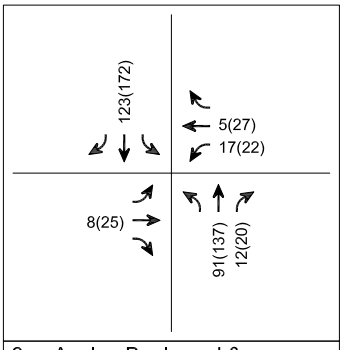
5. Main Street & Torrance Boulevard



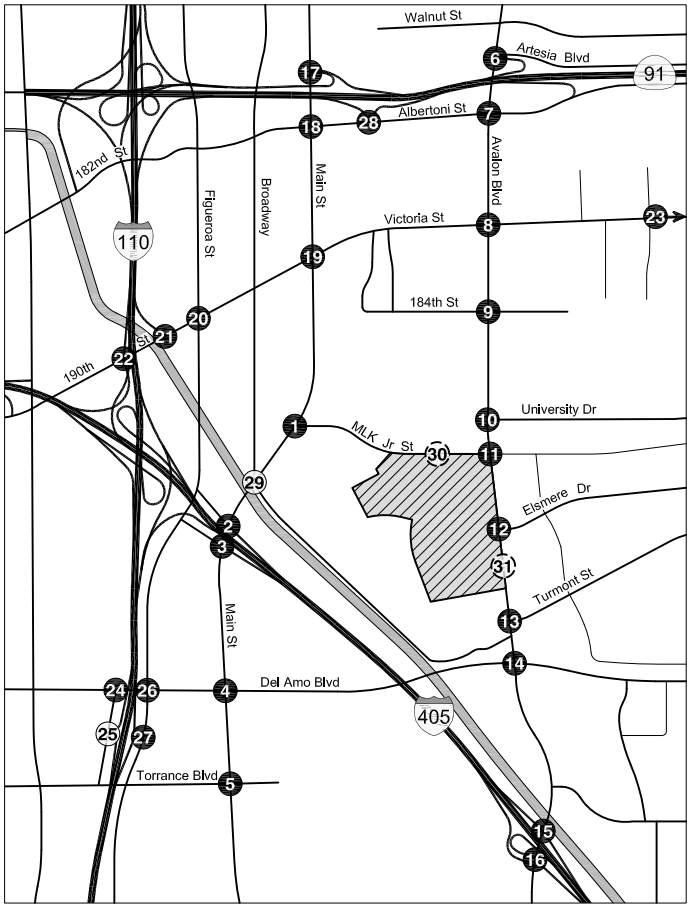
6. Avalon Boulevard & SR-91 WB On-Ramp

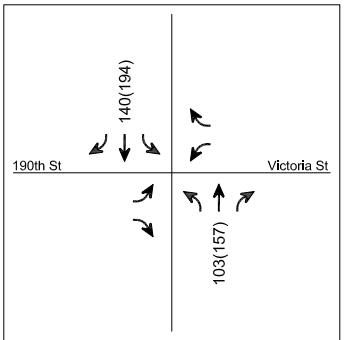


7. Avalon Boulevard & Albertoni Street

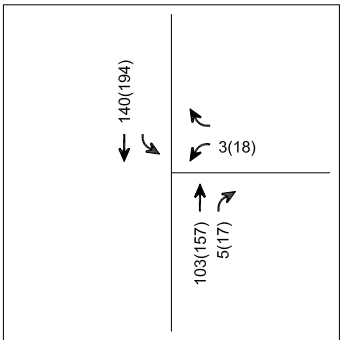


8. Avalon Boulevard & Victoria Street





9. Avalon Boulevard & 184th St / StubHub Center



10. Avalon Boulevard & University Drive

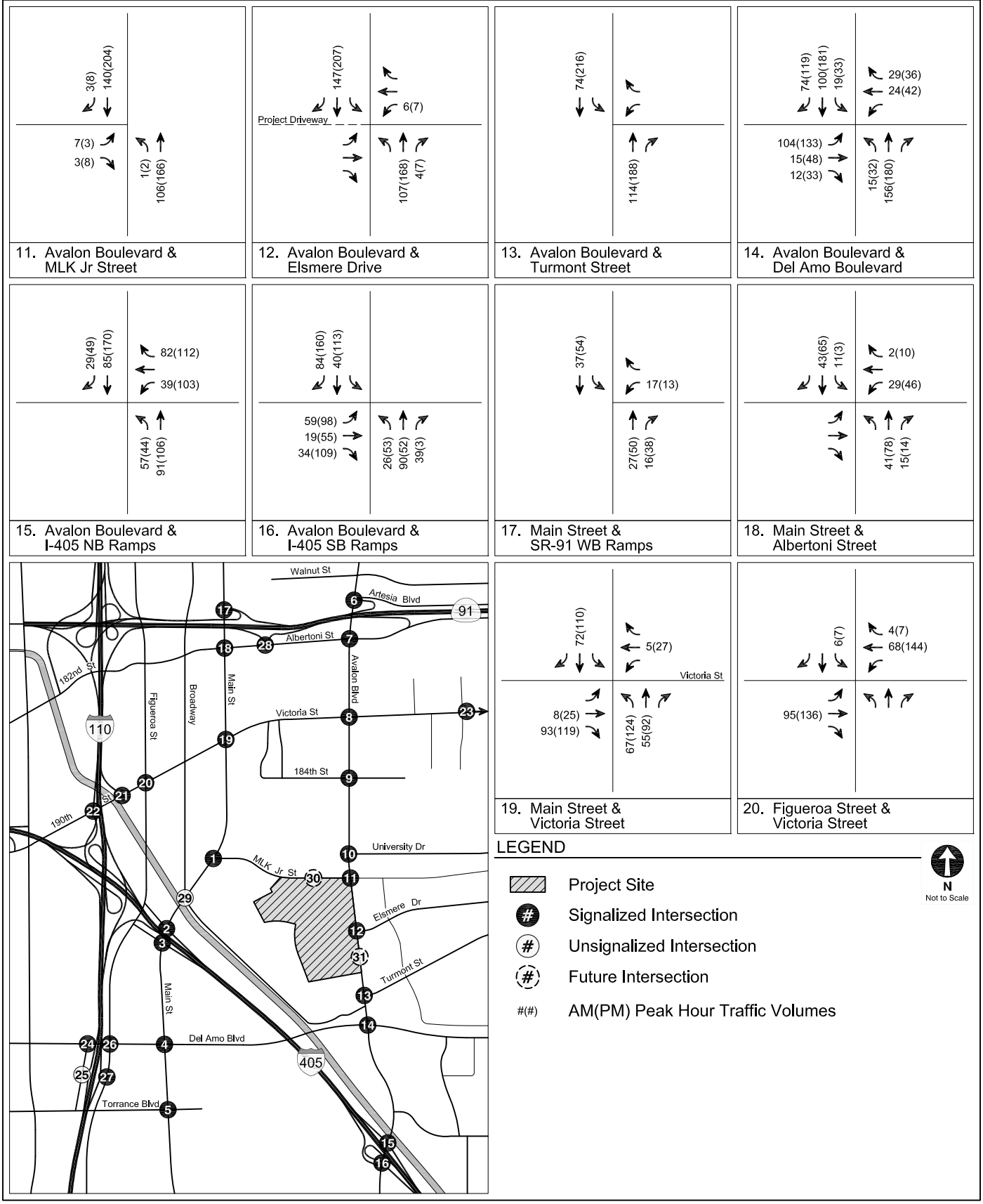
LEGEND

- Project Site
- Signalized Intersection
- Unsignalized Intersection
- Future Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

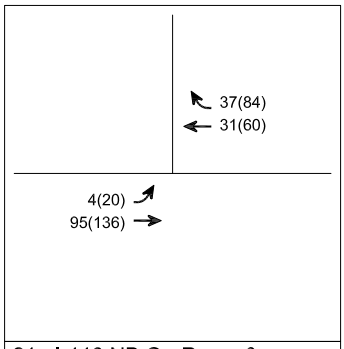
RELATED PROJECT-ONLY
WEEKDAY PEAK HOUR TRAFFIC VOLUMES

FIGURE 10A

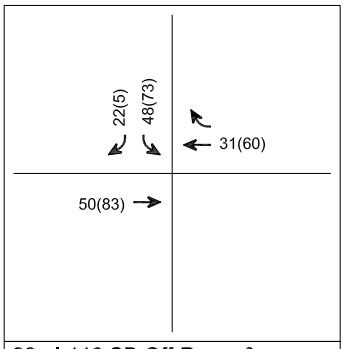


RELATED PROJECT-ONLY
WEEKDAY PEAK HOUR TRAFFIC VOLUMES

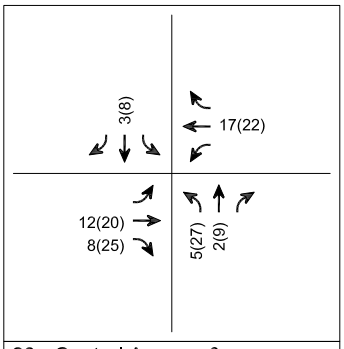
FIGURE
10A (CONT.)



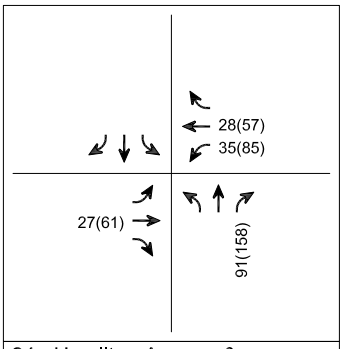
21. I-110 NB On-Ramp & 190th Street



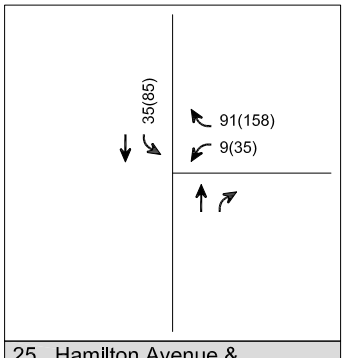
22. I-110 SB Off-Ramp & 190th Street



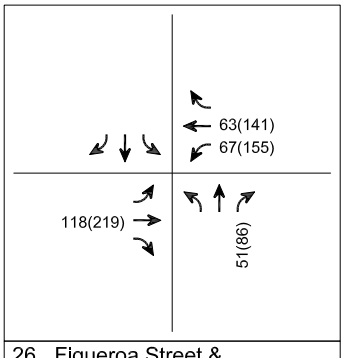
23. Central Avenue & Victoria Street



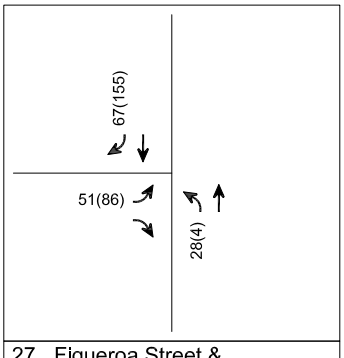
24. Hamilton Avenue & Del Amo Boulevard



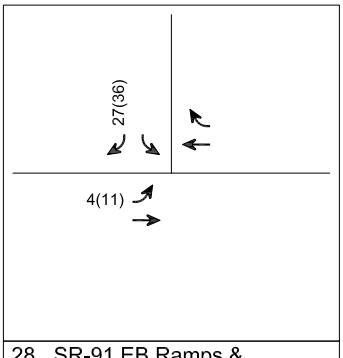
25. Hamilton Avenue & I-110 SB Ramps



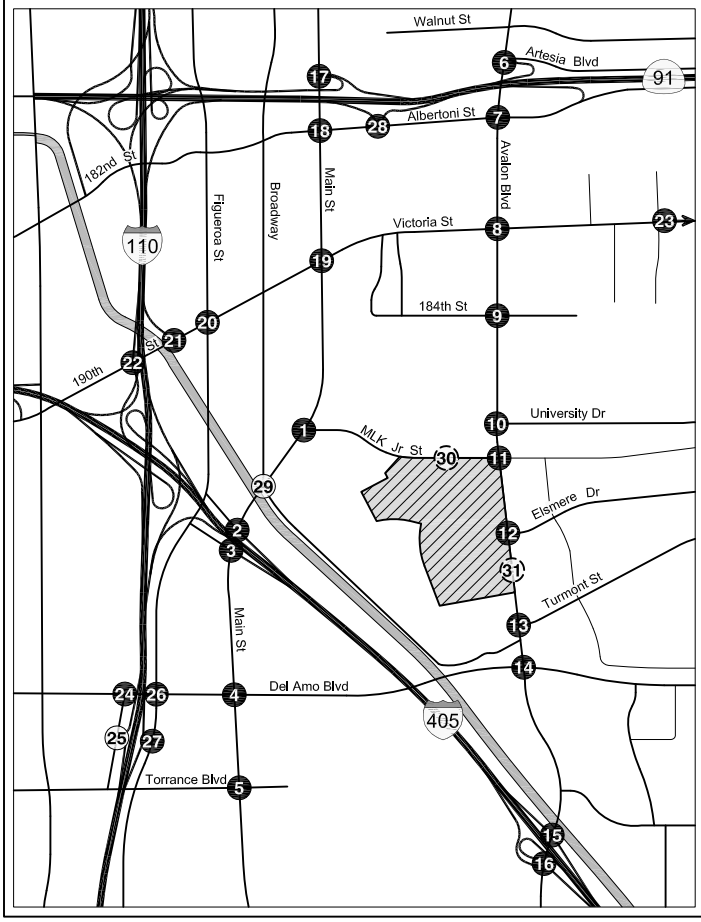
26. Figueroa Street & Del Amo Boulevard

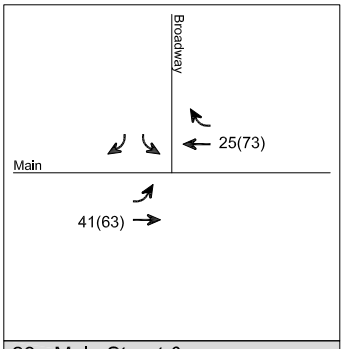


27. Figueroa Street & I-110 NB Ramps

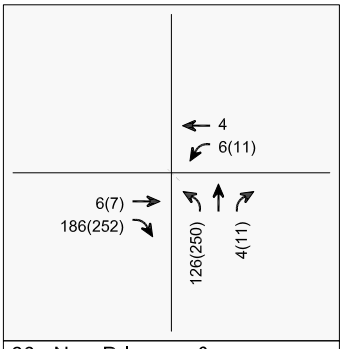


28. SR-91 EB Ramps & Albertoni Street





29. Main Street & Broadway

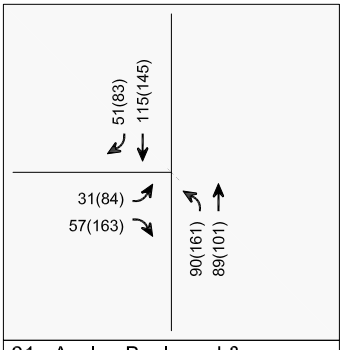


30. New Driveway & Martin Luther King Jr Street

N
Not to Scale

LEGEND

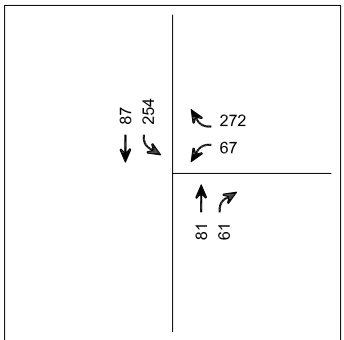
- Project Site
- # Signalized Intersection
- # Unsignalized Intersection
- # Future Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes



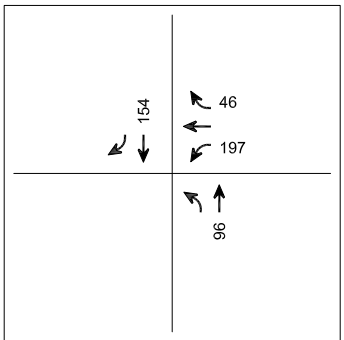
31. Avalon Boulevard & New Driveway

RELATED PROJECT-ONLY
WEEKDAY PEAK HOUR TRAFFIC VOLUMES

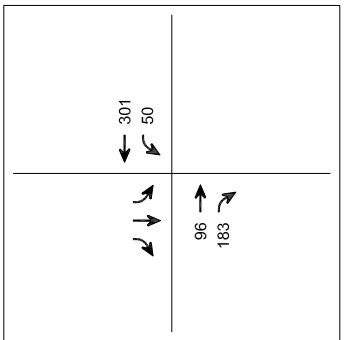
FIGURE
10A (CONT.)



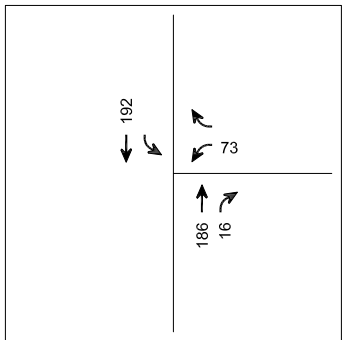
1. Main Street & MLK Jr Street



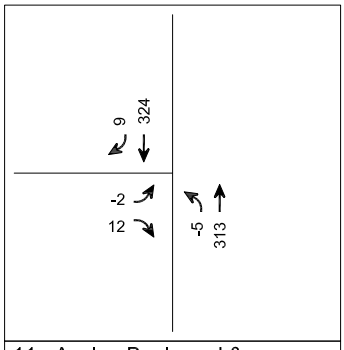
2. Main Street & I-405 NB Off-Ramp



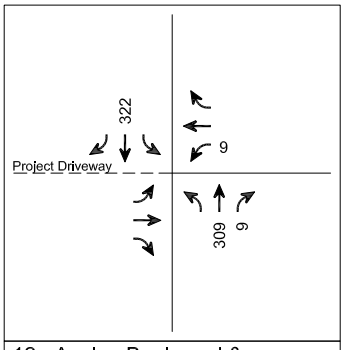
3. Main Street & I-405 SB On-Ramp



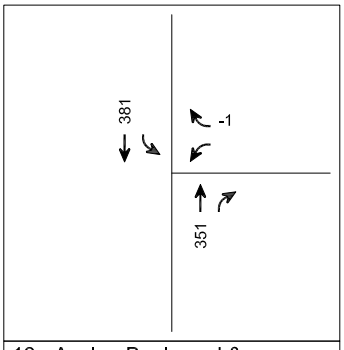
6. Avalon Boulevard & SR-91 WB On-Ramp



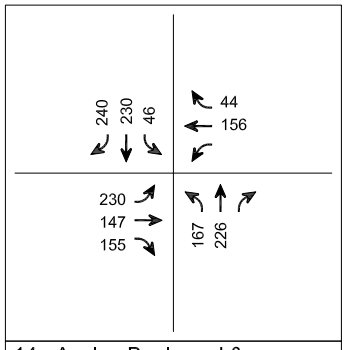
11. Avalon Boulevard & MLK Jr Street



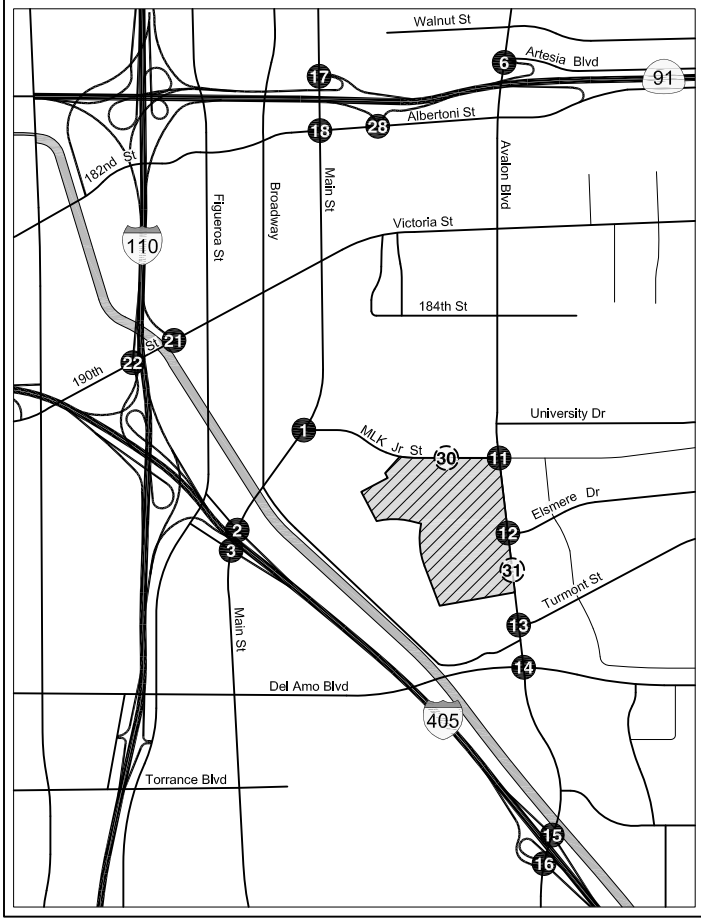
12. Avalon Boulevard & Elsmere Drive

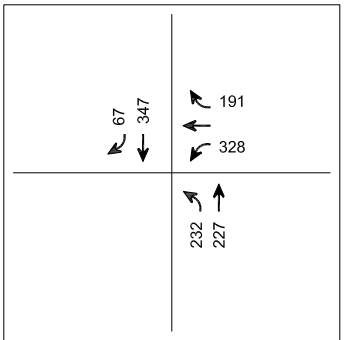


13. Avalon Boulevard & Turmont Street

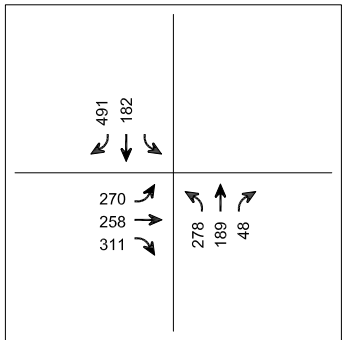


14. Avalon Boulevard & Del Amo Boulevard





15. Avalon Boulevard & I-405 NB Ramps



16. Avalon Boulevard & I-405 SB Ramps

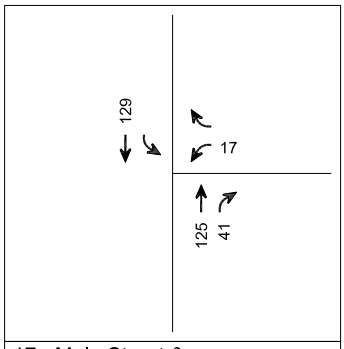
LEGEND

- Project Site
- Signalized Intersection
- Unsignalized Intersection
- Future Intersection
- # Midday Peak Hour Traffic Volumes

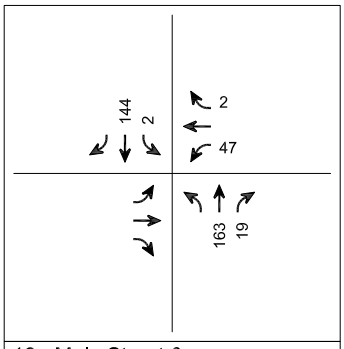
N
Not to Scale

RELATED PROJECT-ONLY
SATURDAY PEAK HOUR TRAFFIC VOLUMES

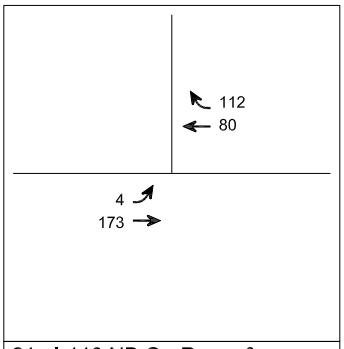
FIGURE 10B



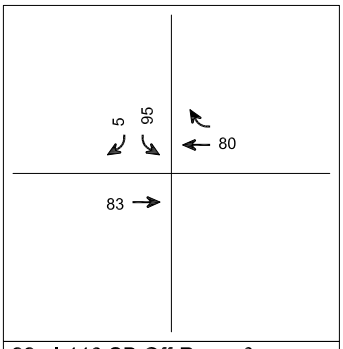
17. Main Street & SR-91 WB Ramps



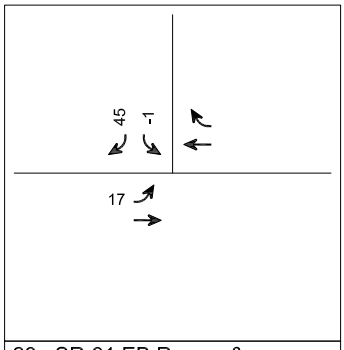
18. Main Street & Albertoni Street



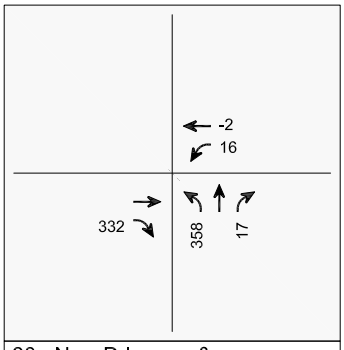
21. I-110 NB On-Ramp & 190th Street



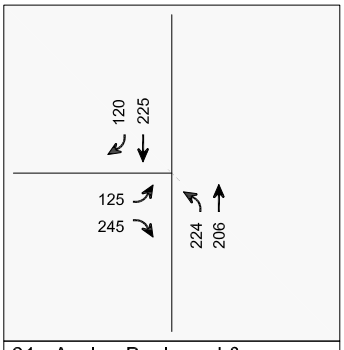
22. I-110 SB Off-Ramp & 190th Street



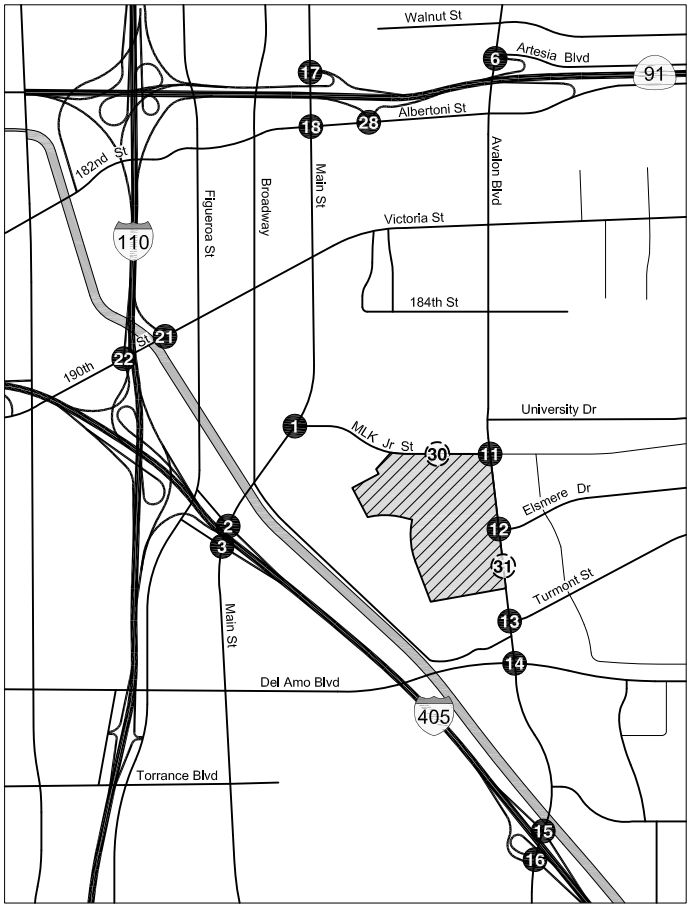
28. SR-91 EB Ramps & Albertoni Street



30. New Driveway & Martin Luther King Jr Street



31. Avalon Boulevard & New Driveway



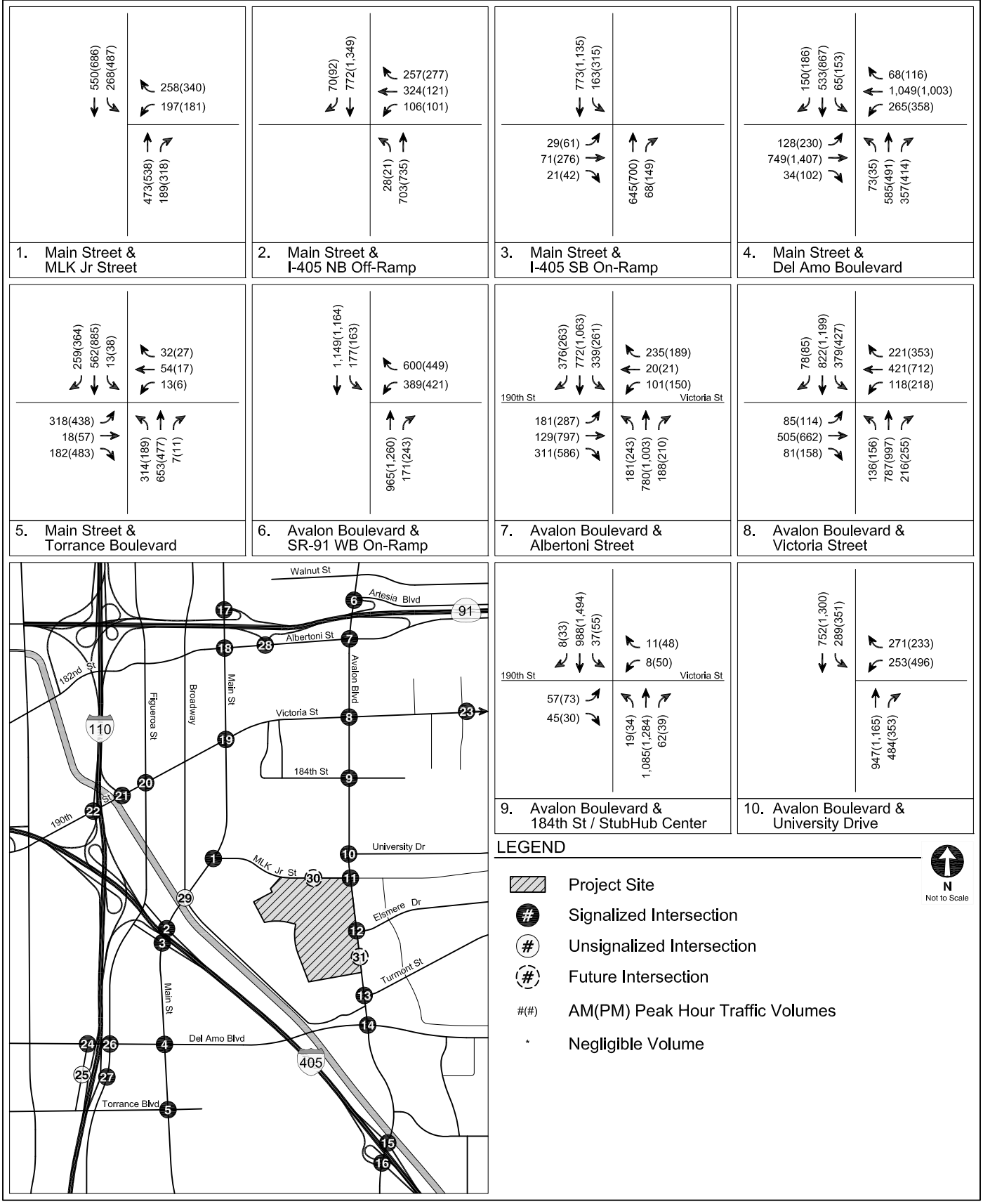
LEGEND

- Project Site
- Signalized Intersection
- Unsignalized Intersection
- Future Intersection
- # Midday Peak Hour Traffic Volumes

N
Not to Scale

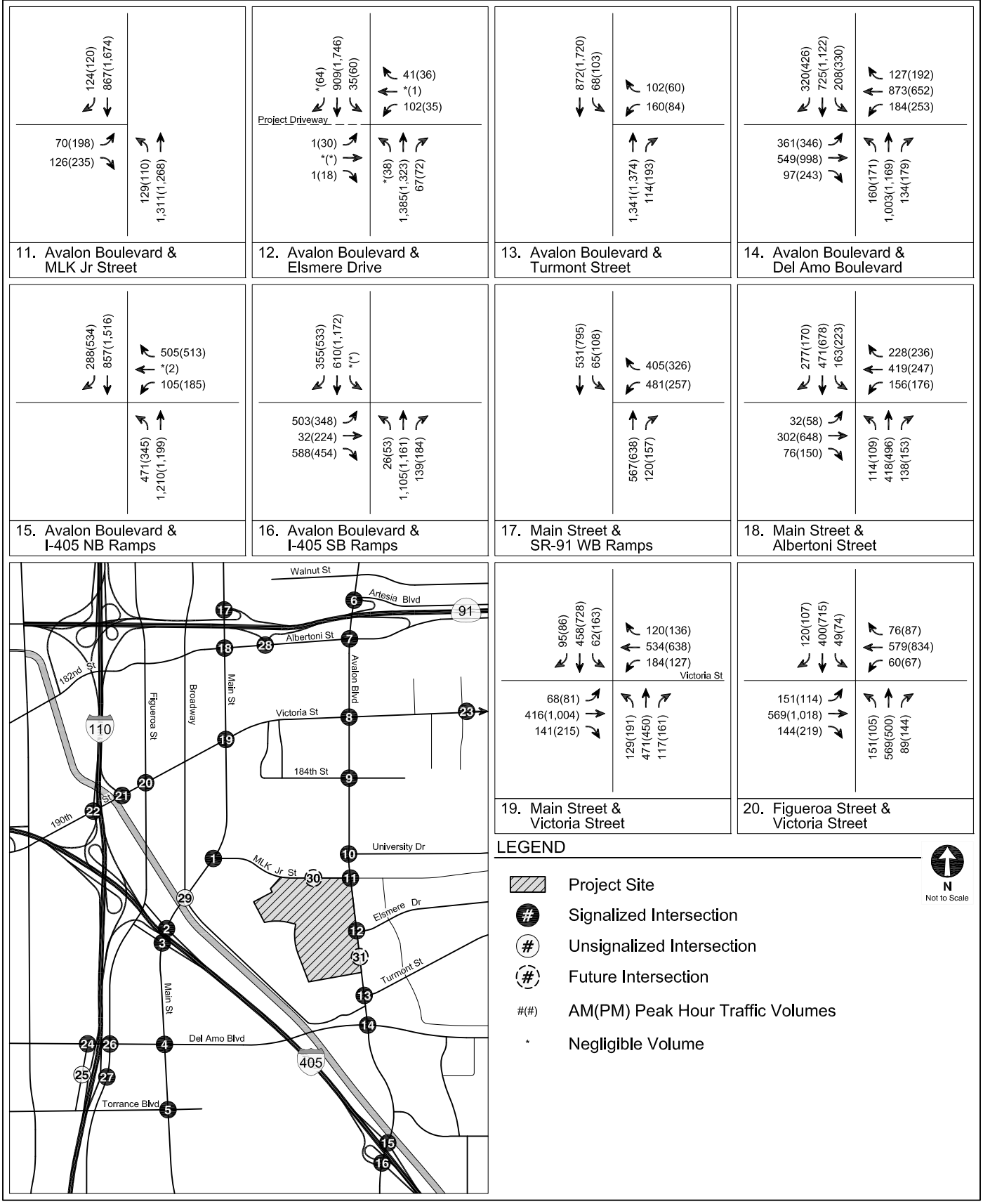
RELATED PROJECT-ONLY
SATURDAY PEAK HOUR TRAFFIC VOLUMES

FIGURE
10B (CONT.)



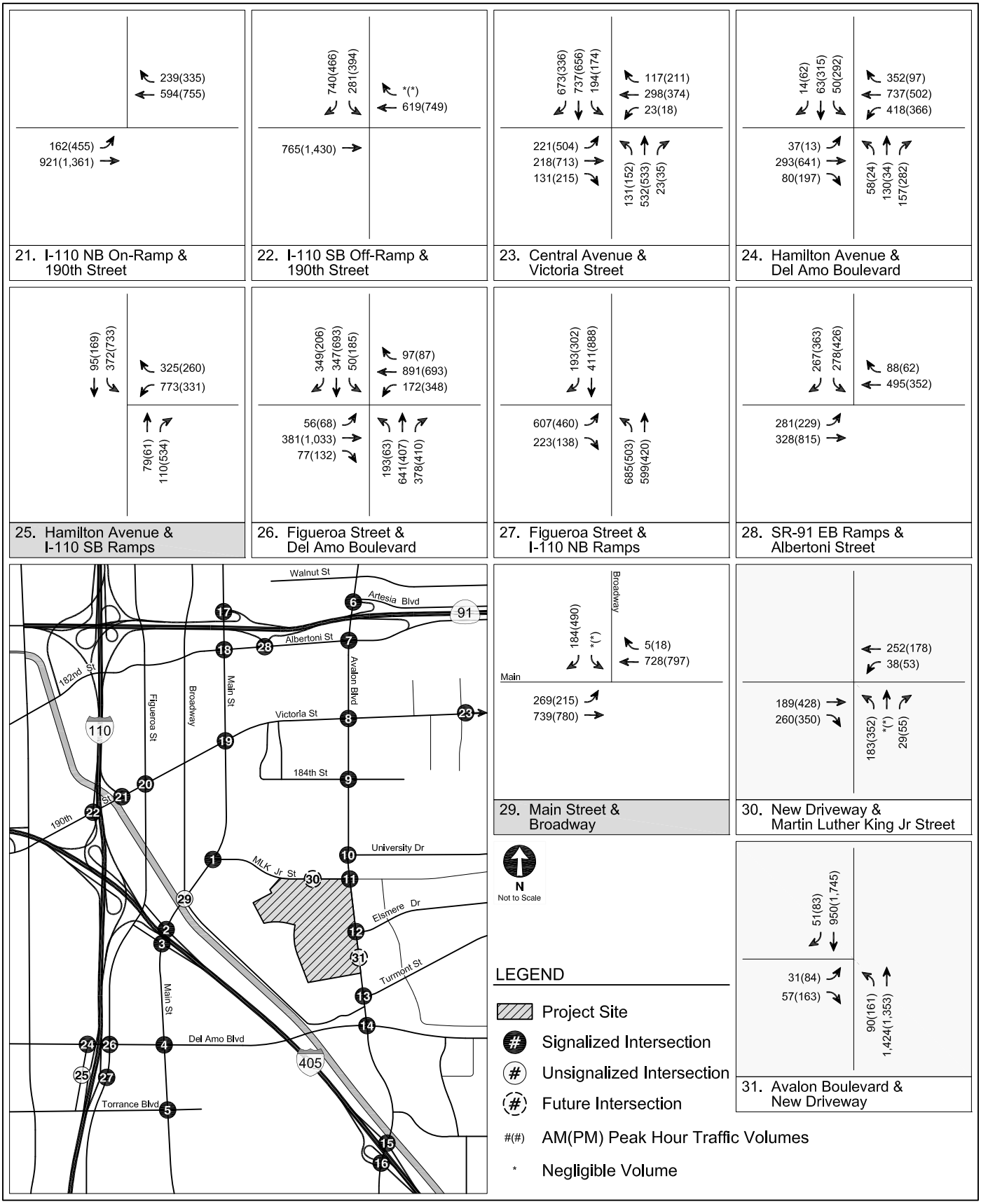
FUTURE WITH PROJECT CONDITIONS (YEAR 2020)
WEEKDAY PEAK HOUR TRAFFIC VOLUMES

FIGURE 11A



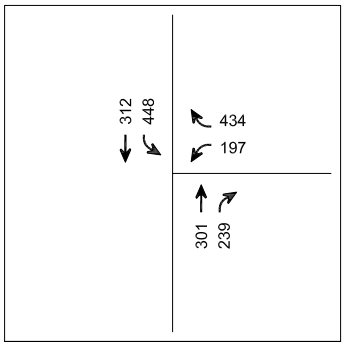
FUTURE WITH PROJECT CONDITIONS (YEAR 2020)
WEEKDAY PEAK HOUR TRAFFIC VOLUMES

FIGURE
11A (CONT.)

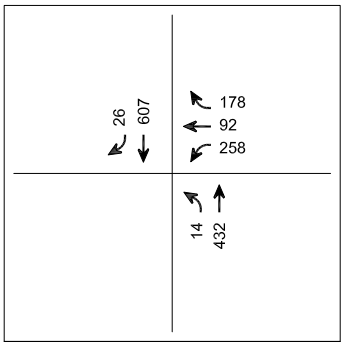


FUTURE WITH PROJECT CONDITIONS (YEAR 2020)
WEEKDAY PEAK HOUR TRAFFIC VOLUMES

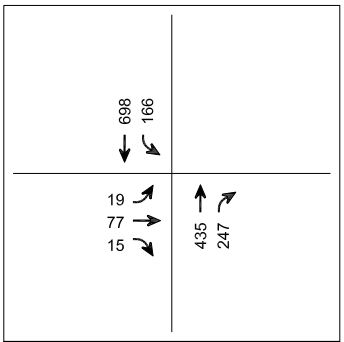
FIGURE
11A (CONT.)



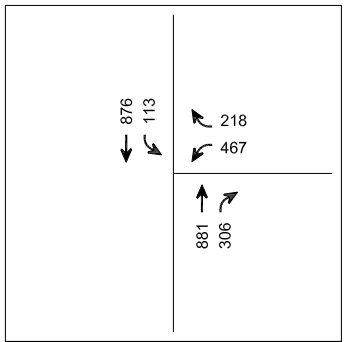
1. Main Street & MLK Jr Street



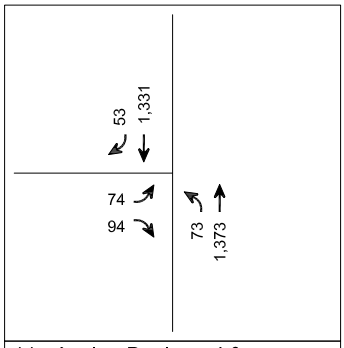
2. Main Street & I-405 NB Off-Ramp



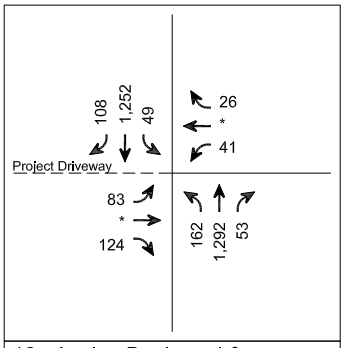
3. Main Street & I-405 SB On-Ramp



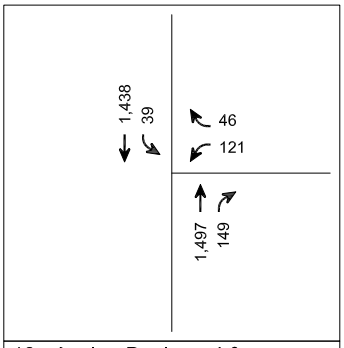
6. Avalon Boulevard & SR-91 WB On-Ramp



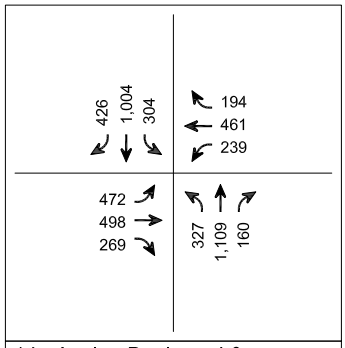
11. Avalon Boulevard & MLK Jr Street



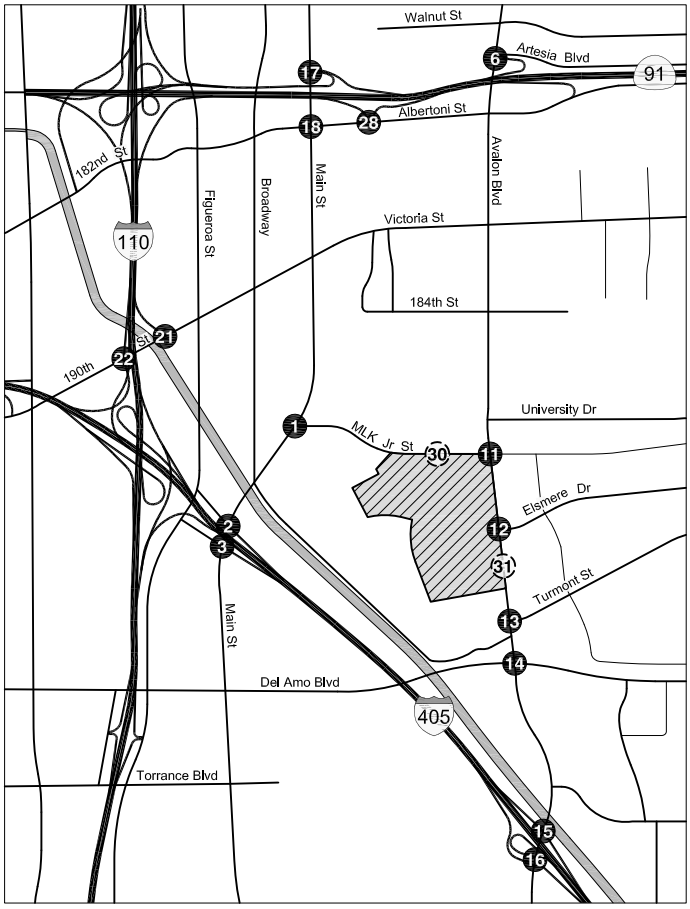
12. Avalon Boulevard & Elsmere Drive

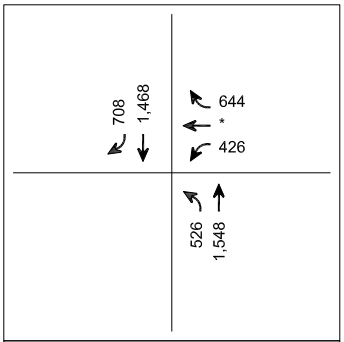


13. Avalon Boulevard & Turmont Street

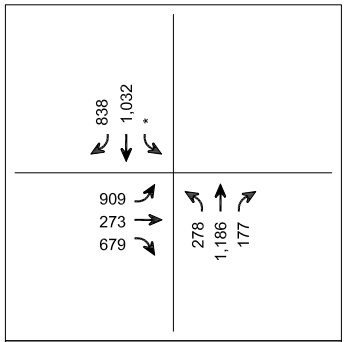


14. Avalon Boulevard & Del Amo Boulevard





15. Avalon Boulevard & I-405 NB Ramps



16. Avalon Boulevard & I-405 SB Ramps

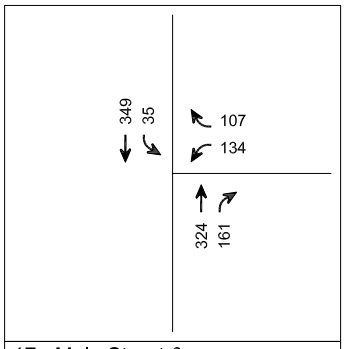
LEGEND

- Project Site
- Signalized Intersection
- Unsignalized Intersection
- Future Intersection
- # Midday Peak Hour Traffic Volume
- * Negligible Volume

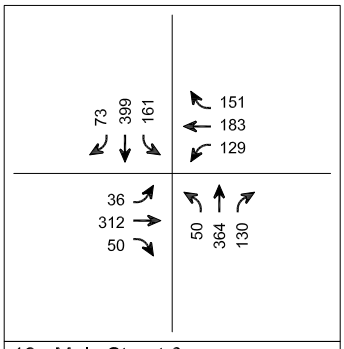
N
Not to Scale

FUTURE WITH PROJECT CONDITIONS (YEAR 2020)
SATURDAY PEAK HOUR TRAFFIC VOLUMES

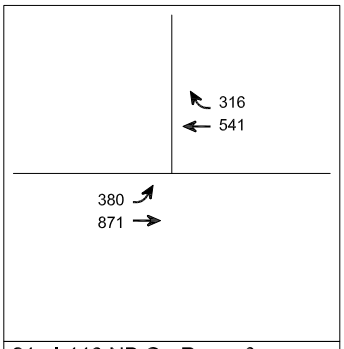
FIGURE 11B



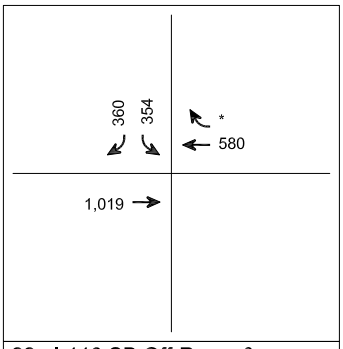
17. Main Street & SR-91 WB Ramps



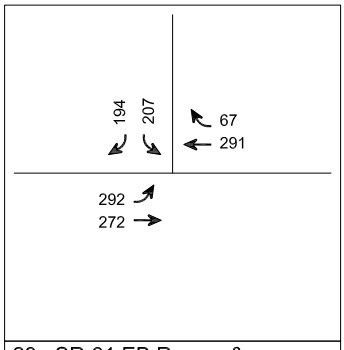
18. Main Street & Albertoni Street



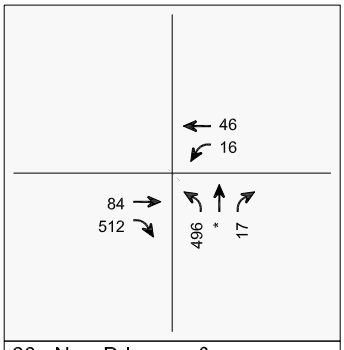
21. I-110 NB On-Ramp & 190th Street



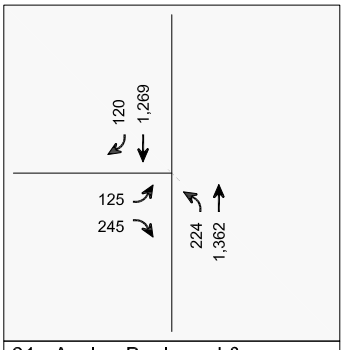
22. I-110 SB Off-Ramp & 190th Street



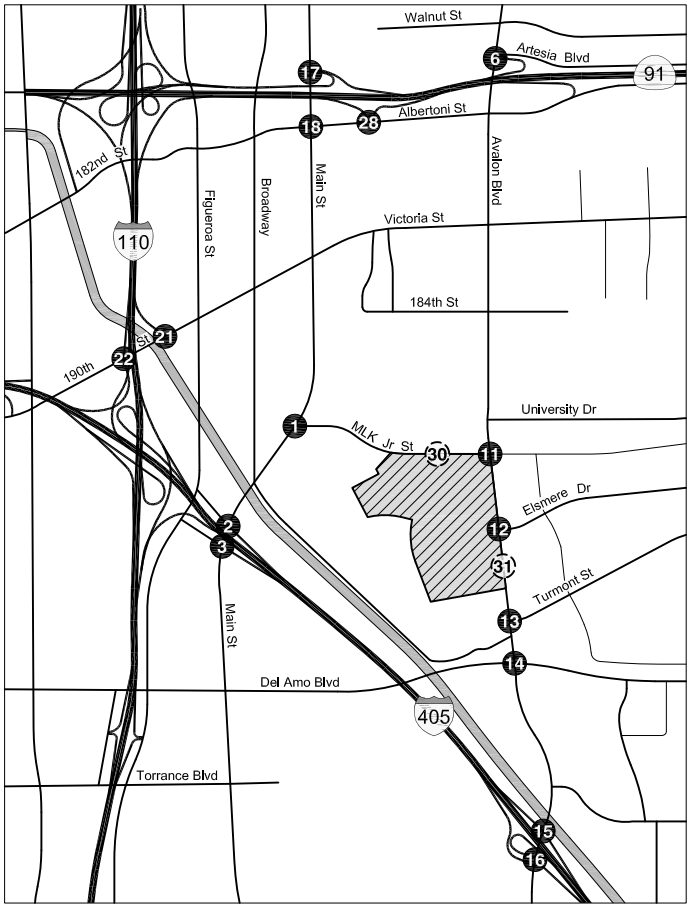
28. SR-91 EB Ramps & Albertoni Street



30. New Driveway & Martin Luther King Jr Street



31. Avalon Boulevard & New Driveway



LEGEND

- Project Site
- # Signalized Intersection
- # Unsignalized Intersection
- # Future Intersection
- # Midday Peak Hour Traffic Volume
- * Negligible Volume

N
Not to Scale

FUTURE WITH PROJECT CONDITIONS (YEAR 2020)
SATURDAY PEAK HOUR TRAFFIC VOLUMES

FIGURE
11B (CONT.)

TABLE 8
RELATED PROJECTS LIST

No.	Address / Project Name	Description	Weekday Trip Generation [a]						Weekend Trip Generation [b]		
			Daily	Morning Peak Hour			Afternoon Peak Hour			Saturday Peak Hour	
				In	Out	Total	In	Out	Total	In	Out	Total
1	21521 S Avalon Blvd Carson, CA	357 apartment units, 30,700 sf retail	3,685	54	156	210	199	13	336	197	191	388
2	1281 E University Dr Carson, CA	47,000 sf retail	2,007	27	16	43	84	91	175	110	102	212
3	21205 S Main St Carson, CA	46 apartment units	306	5	19	24	19	10	29	16	16	32
4	17706 S Main St Gardena, CA	94,731 sf warehouse, 15,000 sf office	503	43	9	52	11	41	53	7	6	13
5	19210 S Vermont Ave, Gardena, CA	61,500 sf office	677	84	11	95	16	76	92	18	15	33
6	1054 W 204th St Torrance, CA [c]	8.5 acre park	425	3	3	6	2	2	4	1	1	2
7	Development District #3 (11 acres) Carson, CA [c	300 dwelling units	1,580	27	109	136	84	45	129	105	105	210
8	The District at South Bay Carson, CA [e][f]	581,000 sf shopping center	12,388	228	85	313	446	502	948	592	546	1,138
9	The Creek at Dominguez Hills Carson, CA	71,000 sf marketplace, 51,000 sf restaurant, indoor sports complex, 30,000 sf youth learning experience, 7,500 sf indoor skydiving, enhanced driving range experience and putting green, 40,000 sf clubhouse, 36,000 sf sports wellness facility, zipline course, 6.6 acre park	16,132	580	384	964	727	669	1,396	878	912	1,790
TOTAL PROJECTED RELATED PROJECT GROWTH			**37,703**	**1,051**	**792**	**1,843**	**1,588**	**1,449**	**3,162**	**1,924**	**1,894**	**3,818**

Notes:
[a] All Trip generation estimates based on The District at South Bay DEIR Fehr & Peers, 2017. All related projects fall within 1.5 miles of the Kimmelman Site.
[b] Trip generation estimates for weekend rates developed based on *Trip Generation 10th Edition* Institute of Transportation Engineers, 2017 unless otherwise stated.
[c] Related projects provided by LA County on July 11th
[d] The 11 acre parcel north of Del Amo was previously included in the Carson Marketplace Project but was sold separately and is not longer part of modified project description for THE DISTRICT AT SOUTH BAY.
[e] Review of The District development phasing indicates that only the 581,000 sf shopping center portion is anticipated to be completed and operational by the Project opening year.
[f] Weekend volumes estimated by growing weekday afternoon peak hour volumes by a factor of 1.2 trips. This is based on the difference between weekday afternoon peak hour and Saturday peak hour of generator data for a shopping center (ITE 820) in Trip Generation ITE 10th edition, 2017.

TABLE 9A
FUTURE WITH PROJECT CONDITIONS (YEAR 2020) - WEEKDAY
INTERSECTION PEAK HOUR LEVELS OF SERVICE

No.	Signalized Intersection	Peak Hour	Existing Conditions (Year 2018)		Existing with Project Conditions (Year 2018)				Future with Project Conditions (Year 2020)			
			V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	Change in V/C Ratio	Significant Impact? [a]	V/C Ratio / Delay	LOS	Change in V/C Ratio	Significant Impact? [a]
1.	Main Street & MLK Jr Street	AM	0.415	A	0.471	A	0.056	NO	0.638	B	0.223	NO
		PM	0.524	A	0.617	B	0.093	NO	0.885	D	0.361	YES
2.	Main Street & I-405 NB Off-Ramp	AM	0.567	A	0.576	A	0.009	NO	0.595	A	0.028	NO
		PM	0.675	B	0.694	B	0.019	NO	0.737	C	0.062	NO
3.	Main Street & I-405 SB On-Ramp	AM	0.452	A	0.463	A	0.011	NO	0.482	A	0.030	NO
		PM	0.702	C	0.718	C	0.016	NO	0.761	C	0.059	YES
4.	Main Street & Del Amo Boulevard	AM	0.665	B	0.679	B	0.014	NO	0.764	C	0.099	YES
		PM	0.864	D	0.876	D	0.012	NO	1.017	F	0.153	YES
5.	Main Street & Torrance Boulevard	AM	0.622	B	0.626	B	0.004	NO	0.657	B	0.035	NO
		PM	0.754	C	0.757	C	0.003	NO	0.783	C	0.029	NO
6.	Avalon Boulevard & SR-91 WB On-Ramp	AM	0.546	A	0.547	A	0.001	NO	0.569	A	0.023	NO
		PM	0.570	A	0.573	A	0.003	NO	0.600	A	0.030	NO
7.	Avalon Boulevard & Albertoni Street	AM	0.647	B	0.649	B	0.002	NO	0.661	B	0.014	NO
		PM	0.843	D	0.865	D	0.022	YES	0.910	E	0.067	YES
8.	Avalon Boulevard & Victoria Street	AM	0.590	A	0.595	A	0.005	NO	0.627	B	0.037	NO
		PM	0.736	C	0.751	C	0.015	NO	0.808	D	0.072	YES
9.	Avalon Boulevard & 184th Street-StubHub Center Gate	AM	0.392	A	0.395	A	0.003	NO	0.417	A	0.025	NO
		PM	0.469	A	0.484	A	0.015	NO	0.524	A	0.055	NO
10.	Avalon Boulevard & University Drive	AM	0.667	B	0.669	B	0.002	NO	0.672	B	0.005	NO
		PM	0.723	C	0.731	C	0.008	NO	0.775	C	0.052	YES
11.	Avalon Boulevard & MLK Jr Street	AM	0.418	A	0.434	A	0.016	NO	0.466	A	0.048	NO
		PM	0.592	A	0.639	B	0.047	NO	0.689	B	0.097	NO
12.	Avalon Boulevard & Elsmere Drive	AM	0.459	A	0.461	A	0.002	NO	0.488	A	0.029	NO
		PM	0.435	A	0.500	A	0.065	NO	0.543	A	0.108	NO
13.	Avalon Boulevard & Turmont Street	AM	0.520	A	0.522	A	0.002	NO	0.631	B	0.111	NO
		PM	0.494	A	0.504	A	0.010	NO	0.672	B	0.178	NO
14.	Avalon Boulevard & Del Amo Boulevard	AM	0.797	C	0.798	C	0.001	NO	0.916	E	0.119	YES
		PM	0.897	D	0.902	E	0.005	NO	0.999	E	0.102	YES
15.	Avalon Boulevard & I-405 NB Ramps	AM	0.470	A	0.470	A	0.000	NO	0.511	A	0.041	NO
		PM	0.508	A	0.511	A	0.003	NO	0.594	A	0.086	NO
16.	Avalon Boulevard & I-405 SB Ramps	AM	0.602	B	0.603	B	0.001	NO	0.663	B	0.061	NO
		PM	0.586	A	0.590	A	0.004	NO	0.641	B	0.055	NO
17.	Main Street & SR-91 WB Ramps	AM	0.624	B	0.632	B	0.008	NO	0.656	B	0.032	NO
		PM	0.581	A	0.592	A	0.011	NO	0.620	B	0.039	NO
18.	Main Street & Albertoni Street	AM	0.688	B	0.698	B	0.010	NO	0.723	C	0.035	NO
		PM	0.814	D	0.849	D	0.035	YES	0.927	E	0.113	YES
19.	Main Street & Victoria Street	AM	0.525	A	0.547	A	0.022	NO	0.642	B	0.117	NO
		PM	0.736	C	0.777	C	0.041	YES	0.934	E	0.198	YES
20.	Figueroa Street & Victoria Street	AM	0.605	B	0.609	B	0.004	NO	0.635	B	0.030	NO
		PM	0.692	B	0.707	C	0.015	NO	0.748	C	0.056	NO
21.	I-110 NB On-Ramp & 190th Street	AM	0.353	A	0.358	A	0.005	NO	0.388	A	0.035	NO
		PM	0.471	A	0.483	A	0.012	NO	0.525	A	0.054	NO
22.	I-110 SB Off-Ramp & 190th Street	AM	0.769	C	0.772	C	0.003	NO	0.802	D	0.033	NO
		PM	0.802	D	0.809	D	0.007	NO	0.838	D	0.036	YES
23.	Central Avenue & Victoria Street	AM	0.799	C	0.800	C	0.001	NO	0.809	D	0.010	NO
		PM	0.736	C	0.739	C	0.003	NO	0.763	C	0.027	NO
24.	Hamilton Avenue & Del Amo Blvd	AM	0.546	A	0.547	A	0.001	NO	0.607	B	0.061	NO
		PM	0.768	C	0.778	C	0.010	NO	0.949	E	0.181	YES
25 [b].	Hamilton Avenue & I-110 SB Ramps	AM	40.0	E	40.6	E	0.6	[d]	55.7	F	15.7	[d]
		PM	81.8	F	86.7	F	4.9	[d]	133.5	F	51.7	[d]
[c]		AM	0.668	B	0.672	B	0.004	[d]	0.725	C	0.057	[d]
		PM	0.659	B	0.668	B	0.009	[d]	0.781	C	0.122	[d]
26.	Figueroa Street & Del Amo Boulevard	AM	0.730	C	0.733	C	0.003	NO	0.752	C	0.022	NO
		PM	0.822	D	0.834	D	0.012	NO	1.053	F	0.231	YES
27.	Figueroa Street & I-110 NB Ramps	AM	0.698	B	0.700	B	0.002	NO	0.726	C	0.028	NO
		PM	0.705	C	0.711	C	0.006	NO	0.739	C	0.034	NO
28.	SR-91 EB Ramps & Albertoni Street	AM	0.551	A	0.552	A	0.001	NO	0.554	A	0.003	NO
		PM	0.621	B	0.621	B	0.000	NO	0.621	B	0.000	NO
29 [b].	Main Street & Broadway	AM	17.8	C	18.4	C	0.6	NO	19.1	C	1.3	NO
		PM	17.1	C	18.0	C	0.9	NO	20.0	C	2.9	NO
30.	New driveway & MLK Jr Street	AM	New Intersection		0.291	A	-	N/A	0.401	A	-	N/A
		PM			0.453	A	-	N/A	0.621	B	-	N/A
31.	Avalon Boulevard & New driveway	AM	New Intersection		0.378	A	-	N/A	0.432	A	-	N/A
		PM			0.433	A	-	N/A	0.633	B	-	N/A

AM - Weekday AM Peak Hour, PM - Weekday PM Peak Hour
[a] Significance based on County of Los Angeles Standards
[b] A signal warrant was performed to determine significant impacts for unsignalized intersections.
[c] Due to the shared jurisdiction, the intersection was analyzed using both HCM (Caltrans) and ICU (LACDPW) methodology
[d] Warrants were met under Existing, Existing with Project, and Future with Project Conditions

TABLE 9B
FUTURE WITH PROJECT CONDITIONS (YEAR 2020) - SATURDAY
INTERSECTION PEAK HOUR LEVELS OF SERVICE

No.	Signalized Intersection	Peak Hour	Existing Conditions (Year 2018)		Existing with Project Conditions (Year 2018)				Future with Project Conditions (Year 2020)			
			V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	Change in V/C Ratio	Significant Impact? [a]	V/C Ratio / Delay	LOS	Change in V/C Ratio	Significant Impact? [a]
1.	Main Street & MLK Jr Street	MD	0.303	A	0.447	A	0.144	NO	0.820	D	0.517	YES
2.	Main Street & I-405 NB Off-Ramp	MD	0.321	A	0.347	A	0.026	NO	0.468	A	0.147	NO
3.	Main Street & I-405 SB On-Ramp	MD	0.328	A	0.356	A	0.028	NO	0.474	A	0.146	NO
6.	Avalon Boulevard & SR-91 WB On-Ramp	MD	0.424	A	0.448	A	0.024	NO	0.476	A	0.052	NO
11.	Avalon Boulevard & MLK Jr Street	MD	0.396	A	0.419	A	0.023	NO	0.493	A	0.097	NO
12.	Avalon Boulevard & Elsmere Drive	MD	0.365	A	0.515	A	0.150	NO	0.588	A	0.223	NO
13.	Avalon Boulevard & Turmont Street	MD	0.436	A	0.470	A	0.034	NO	0.628	B	0.192	NO
14.	Avalon Boulevard & Del Amo Boulevard	MD	0.634	B	0.659	B	0.025	NO	1.041	F	0.407	YES
15.	Avalon Boulevard & I-405 NB Ramps	MD	0.528	A	0.543	A	0.015	NO	0.722	C	0.194	NO
16.	Avalon Boulevard & I-405 SB Ramps	MD	0.657	B	0.674	B	0.017	NO	1.113	F	0.456	YES
17.	Main Street & SR-91 WB Ramps	MD	0.277	A	0.295	A	0.018	NO	0.357	A	0.080	NO
18.	Main Street & Albertoni Street	MD	0.424	A	0.464	A	0.040	NO	0.596	A	0.172	NO
21.	I-110 NB On-Ramp & 190th Street	MD	0.353	A	0.362	A	0.009	NO	0.416	A	0.063	NO
22.	I-110 SB Off-Ramp & 190th Street	MD	0.603	B	0.614	B	0.011	NO	0.640	B	0.037	NO
28	SR-91 EB Ramps & Albertoni Street	MD	0.433	A	0.437	A	0.004	NO	0.443	A	0.010	NO
30.	New driveway & MLK Jr Street	MD	New Intersection		0.299	A	-	N/A	0.740	C	-	N/A
31.	AvalonBoulevard & New driveway	MD	New Intersection		0.341	A	-	N/A	0.613	B	-	N/A

MD - Saturday Midday Peak Hour
[a] Significance based on County of Los Angeles Standards

Chapter 6
Unsignalized Intersection Analysis

As described in Chapter 1, the two unsignalized study intersections were analyzed using the HCM methodology to determine the overall intersection delay under both Existing and Future Conditions. The intersection of Hamilton Avenue & I-110 Southbound ramps (Intersection #25) was also analyzed using the ICU methodology, as requested by the County. Based on *Draft Traffic Impact Analysis Report Guidelines,* a signal warrant analysis was conducted for unsignalized intersections to evaluate for the potential installation of a new traffic signal. The signal warrant analysis was conducted per the guidelines set forth in *California Manual on Uniform Traffic Control Devices* (Caltrans, 2012) (California MUTCD).

SIGNAL WARRANT ANALYSIS

The following two signal warrants were performed for the unsignalized intersections in the study area under Existing Conditions:

25. Hamilton Avenue & I-110 Southbound Ramps
29. Main Street & Broadway

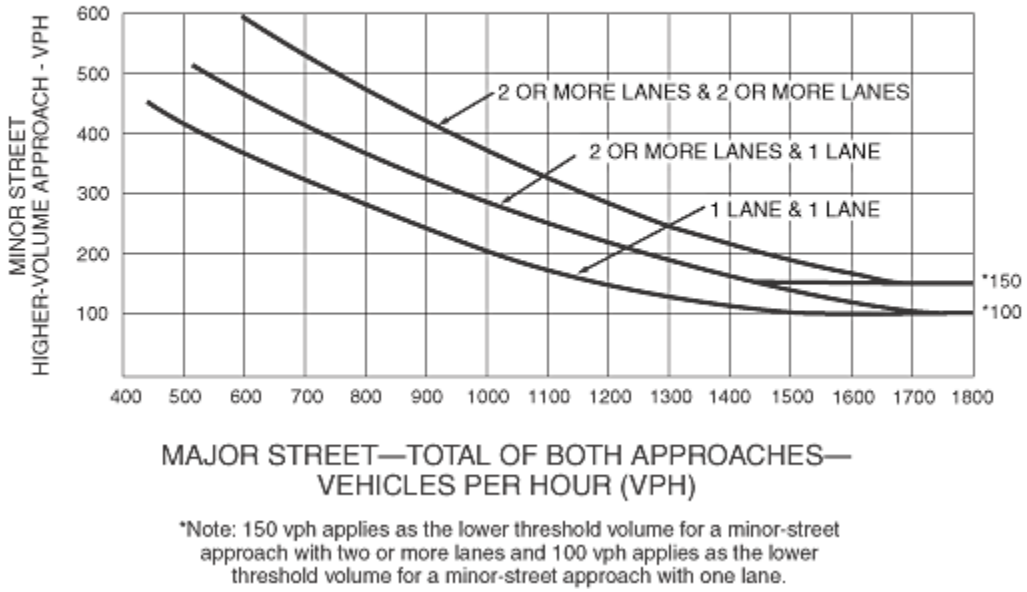
The intersections were analyzed according to Warrant 3 (peak hour). The following methodologies, as quoted from the California MUTCD, were used to evaluate signal warrants at the intersection:

Warrant 3, Peak-Hour Vehicular Volume Warrant

Signal Warrant 3 is intended for use at a location where traffic conditions are such that for a minimum of one hour of an average day, the minor-street traffic suffers undue delay when entering or crossing the major street. Combined volumes for both approaches of

the major street are included while only the volume from the higher minor street approach is included. At an intersection with a high volume of left-turn traffic from the major street, the analysis may include the major street left-turn volumes plus the minor street approach volume as the total "minor street" volume. The warrant is satisfied if traffic volumes for any one hour of an average day exceed the plotted lines shown in the following figure.

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Hamilton Avenue & I-110 Southbound Ramps (Intersection #25) met warrants for signal installation in the afternoon peak hour under Existing, Existing with Project, and Future with Project Conditions. Detailed signal warrant worksheets are provided in Appendix G.

The determination that an unsignalized intersection meets the criteria of a traffic signal warrant does not in itself require the installation of a signal. Rather, the decision on whether a traffic signal should be installed is made by the governing jurisdictions taking into consideration other factors such as distance to adjacent signalized intersections and interruption to traffic flow along the major street. Because LACDPW and Caltrans share jurisdiction of this intersection, both entities would need to agree on the installation of a traffic signal.

Chapter 7
Mitigation Measures

This chapter describes the transportation mitigation measures considered in order to mitigate the significant transportation impacts at study intersections as a result of the Project and associated with cumulative area growth.

IMPACTED LOCATIONS

The various mitigation measures described in this chapter relate to the four significantly impacted intersections identified in the weekday under Existing with Project (Year 2018) Conditions and the 13 significantly impacted intersections identified in the weekday (including the four intersections identified in the weekday Existing with Project analysis) and the three significantly impacted intersections on Saturday under Future with Project (Year 2020) Conditions presented in Chapter 5.

Under the Existing with Project Conditions, before mitigation, the Project is expected to result in significant traffic impacts at the following four intersections:

7. Avalon Boulevard & Albertoni Street (afternoon peak hour)
18. Main Street & Albertoni Street (afternoon peak hour)
19. Main Street & Victoria Street (afternoon peak hour)
25. Hamilton Avenue & I-110 Southbound Ramps (afternoon peak hour)

The Project is expected to result in significant cumulative weekday traffic impacts in the Future with Project Conditions, before mitigation, at the following 13 intersections (including the four intersections identified in the Existing with Project analysis):

1. Main Street & Martin Luther King, Jr. Street (weekday afternoon peak hour)
3. Main Street & I-405 Southbound on-ramp (afternoon peak hour)
4. Main Street & Del Amo Boulevard (morning and afternoon peak hours)
7. Avalon Boulevard & Albertoni Street (afternoon peak hour)
8. Avalon Boulevard & Victoria Street (afternoon peak hour)
10. Avalon Boulevard & University Drive (afternoon peak hour)
14. Avalon Boulevard & Del Amo Boulevard (morning and afternoon peak hours)
18. Main Street & Albertoni Street (afternoon peak hour)
19. Main Street & Victoria Street (afternoon peak hour)
22. I-110 Southbound off-ramp & 190th Street (afternoon peak hour)
24. Hamilton Avenue & Del Amo Boulevard (afternoon peak hour)
25. Hamilton Avenue & I-110 Southbound Ramps (morning and afternoon peak hours)
26. Figueroa Street & Del Amo Boulevard (afternoon peak hour)

Although not required by LACDPW, Chapter 5 also presented an analysis of Saturday conditions at key intersections for Project operations. The analysis did not project significant transportation impacts as a result of the Project, but did identify cumulative significant impacts during Saturday conditions at the following three intersections (including one intersection not identified in the weekday analysis):

1. Main Street & Martin Luther King, Jr. Street (also weekday cumulative impact)
14. Avalon Boulevard & Del Amo Boulevard (also weekday cumulative impact)
16. Avalon Boulevard & I-405 Southbound ramps

Therefore, the mitigation measures proposed in this chapter are intended to address the weekday and Saturday significant transportation impacts.

TRANSPORTATION MITIGATION MEASURES

Consistent with the LACDPW guidelines, the mitigation program for the Project was developed in the following manner:

1. The development and implementation of measures to mitigate direct Project impacts, as identified by the Existing with Project Conditions analysis.

2. The identification of measures to mitigate cumulative impacts, as identified by the Future with Project Conditions analysis.

As described in Chapter 1, the determination of the impact is based on the pre-project intersection LOS conditions. The Project identified mitigation measures that may reduce the direct Project impact at the intersection to a less than significant level. Similarly, the Project identified feasible mitigation measures to address the cumulative impact of an intersection. Consistent with LACDPW policies, intersections operating at LOS C or D with a projected cumulative impact meet the minimum level of acceptable intersection operations; operational improvements may be utilized at these cumulatively impacted locations operating at LOS C or D. An operational analysis for impacted locations that meet this criteria is provided in Table 10. The proposed mitigation measures were developed or identified in a manner consistent with LACDPW policies.

For unsignalized intersections, a signal warrant analysis was performed, as detailed in Chapter 6, to confirm that those intersections that operate at an unacceptable LOS also meets signal warrants. Intersections that warranted a signal under Existing Conditions and contained Project traffic were considered as significant Project and cumulative impacts. The proposed mitigation measures were developed or identified in a manner consistent with LACDPW policies.

It should be noted that LACDPW does not have jurisdiction over all of the surrounding street network, as some streets/street segments are within other jurisdictions (City of Los Angeles, City of Carson, Caltrans) and those jurisdictions will decide the ultimate feasibility of the mitigation measures.

SPECIFIC INTERSECTION IMPROVEMENT MEASURES

Intersection improvements designed to alleviate both significant direct Project and cumulative impacts may consist of physical improvements, such as widening, restriping, or signalization where applicable. The intersection improvements discussed below were considered at the significantly impacted study intersections.

Mitigation Measures for Direct Project Impacts

These mitigation measures described were developed to address direct Project significant impacts at the four intersections below:

7. Avalon Boulevard & Albertoni Street. This intersection is projected to operate at LOS D, which meets the LACDPW minimum requirements for acceptable intersection operation. The impact could be eliminated by providing an additional northbound left-turn lane, for a total of two northbound left-turn lanes on Avalon Boulevard. This measure could be accommodated by restriping the painted gore/median between the existing northbound left-turn and through lanes; the existing protected left-turn phasing on the north and south approaches may require adjustment to a lead/lag operation.

18. Main Street & Albertoni Street. This intersection is projected to operate at LOS D, which meets the LACDPW minimum requirements for acceptable intersection operation. The impact could be eliminated by providing an eastbound right-turn lane on Albertoni Street; this would result in an eastbound approach providing one left-turn lane, two through lanes, and one right-turn lane. This measure could be accommodated by restriping the existing 24 foot wide curb lane into a 12 foot wide through lane and 12 foot wide right-turn lane and restricting on-street parking for an additional 40 feet along the south curb of Albertoni Street west of the intersection (for a total of 100 feet with restricted parking equivalent to approximately five parking spaces).

19. Main Street & Victoria Street. This intersection is projected to operate at LOS C, which meets the LACDPW minimum requirements for acceptable intersection operation. The impact could be reduced to less than significant levels by providing an eastbound right-turn lane on Victoria Street; this would result in an eastbound approach providing one left-turn lane, two

through lanes, and one right-turn lane. This measure could be accommodated by restriping the existing 44 foot wide eastbound approach to provide a total of four 11 foot wide lanes, comprised of one left-turn lane, two through lanes, and one right-turn lane and restricting on-street parking for an additional 50 feet along the south curb of Albertoni Street, west of the intersection (for a total of 100 feet with restricted parking equivalent to approximately five parking spaces).

25. Hamilton Avenue & I-110 Southbound Ramps. The potentially significant impact for this intersection could be reduced to less than significant levels with the installation of a traffic signal, consisting of a northbound/southbound split phase and westbound permitted phase with overlapping right-turns, and the reconfiguration of the southbound approach to provide a dedicated left-turn lane and a left-turn/through lane. Because signal warrants were met for this intersection under Existing Conditions, a proportionate share contribution, as determined by LACDPW, would be made towards the mitigation measure, if approved by LACDPW and Caltrans. Alternatively, if the signal is not implemented, an alternative mitigation is to reconfigure the existing southbound approach to provide a dedicated left-turn lane and a left-turn/through lane. This alternative measure could be accommodated with restriping of the southbound lanes to the proposed configuration. Implementation of one or both measures may require the approval of Caltrans.

Mitigation Measures for Cumulative Impacts

The mitigation measures below were identified to address the significant cumulative impacts at the 14 intersections below (including the 13 weekday cumulative impacts and three Saturday cumulative impacts, two of which also occur as weekday impacts):

1. Main Street & Martin Luther King, Jr. Street. The significant cumulative transportation impact at this intersection could be reduced to a less than significant level by reconfiguring the westbound approach to provide one left-turn lane, one shared left/right-turn lane, and one right-turn lane. Additionally, a new northbound right-turn lane would be installed on Main Street; this would result in a northbound approach providing two through lanes and one right-turn lane. Both the northbound and southbound improvements could be implemented by restriping the existing lanes.

3. Main Street & I-405 Southbound On-ramp. This intersection is projected to operate at LOS C, which meets the LACDPW minimum requirements for acceptable intersection operation. The impact could be reduced to less than significant levels with the reconfiguration of the eastbound approach to provide a shared left-turn/through lane and a shared through/right-turn lane (onto the I-405 on-ramp). This measure could be accommodated with restriping the southbound lanes to the proposed configuration and may require the approval of Caltrans.

4. Main Street & Del Amo Boulevard. The significant cumulative transportation impact at this intersection could be reduced by providing a northbound right-turn lane on Main Street, overlapping operation with the protected westbound left-turn phase, adding a westbound left-turn lane, and restricting westbound U-turns. This would result in a northbound approach providing one left-turn lane, two through lanes, and one right-turn lane and a westbound approach providing two left-turn lanes, two through lanes, and one through-right lane. The northbound improvements could be implemented by restriping the existing lanes while the westbound improvements would require widening through the removal of the existing median island and narrowing the north sidewalk by approximately five feet.

7. Avalon Boulevard & Albertoni Street. The mitigation measure identified in the Existing with Project condition mitigates the Project impact to a less than significant condition; this satisfies the Project obligation to mitigate its own impacts.

8. Avalon Boulevard & Victoria Street. This intersection is projected to operate at LOS D, which meets the LACDPW minimum requirements for acceptable intersection operation. The significant cumulative impact at this intersection could be reduced to a less than significant level by reconfiguring the eastbound approach to provide one left-turn lane, two through lanes, and one shared through/right-turn lane and reconfiguring the eastbound departure to provide three receiving lanes; this reconfiguration could be accomplished through restriping. However, this may create a trapped right turn lane into the Parking Lot 11 & 12 entrance of Dignity Health Sports Park. Although the physical improvement described above could be accomplished through restriping, the geometric limitations of the eastbound departure lanes beyond the immediate vicinity of the intersection could result in the improvement being determined infeasible. Pursuant to LACDPW policy, however, when an intersection is projected to exceed the significance criteria but still operate at a satisfactory LOS (LOS D or better), LACDPW may

direct that operational improvements be implemented for the intersection rather than physical improvements. As such, per LACDPW direction, this intersection was evaluated for operational deficiencies by comparing the projected turning lane queue lengths under Future with Project conditions to the existing turning lane storage capacity at the intersection. Based on the results of the evaluation, no operational deficiencies were identified and, thus, no operational improvements are required.

10. Avalon Boulevard & University Drive. This intersection is projected to operate at LOS C, which meets the LACDPW minimum requirements for acceptable intersection operation. The significant cumulative impacts at this intersection could be reduced to a less than significant level by reconfiguring the westbound approach to provide two left-turn lanes and one right-turn lane; this reconfiguration will require modifications to the existing medians located on both Avalon Boulevard and University Avenue. The dedicated westbound bike lane on University Avenue will also require conversion into a shared lane at the intersection. Although the physical improvement described above could be accomplished through modifications to the existing medians, the physical requirements for the existing electric transmission tower within the Avalon Boulevard median could result in the improvement being determined infeasible. Pursuant to LACDPW policy, however, when an intersection is projected to exceed the significance criteria but still operate at a satisfactory LOS (LOS D or better), LACDPW may direct that operational improvements be implemented for the intersection rather than physical improvements. As such, per LACDPW direction, this intersection was evaluated for operational deficiencies by comparing the projected turning lane queue lengths under Future with Project conditions to the existing turning lane storage capacity at the intersection. Based on the results of the evaluation, no operational deficiencies were identified and, thus, no operational improvements are required.

14. Avalon Boulevard & Del Amo Boulevard. The significant cumulative transportation impact at this intersection could be reduced by providing an additional northbound left-turn lane on Avalon Boulevard, a new southbound right-turn lane, and a new eastbound through-right lane. These mitigations would result in a northbound approach providing two left-turn lanes, three through lanes, and one right-turn lane, a southbound approach providing two left-turn lanes, three through lanes, and one right-turn lane, and an eastbound approach providing one left-turn lane, two through lanes, and one through-right lane. These measures could be accommodated by physically reconstructing the northbound left-turn pocket to generally mirror

the configuration and dimensions of the existing southbound left-turn pocket and restriping the southbound and eastbound approaches within the existing right of way.

16. Avalon Boulevard & I-405 Southbound Ramps. The significant Saturday cumulative transportation impact at this intersection could be reduced with operational modifications consisting of the addition of a southbound right-turn overlap signal phase and the associated signal equipment upgrades.

18. Main Street & Albertoni Street. The mitigation measure identified in the Existing with Project condition mitigates the Project impact to a less than significant condition; this satisfies the Project obligation to mitigate its contribution to cumulative impacts. However, a cumulative impact would remain.

19. Main Street & Victoria Street. The mitigation measure identified in the Existing with Project condition mitigates the Project impact to a less than significant condition; this satisfies the Project obligation to mitigate its contribution to cumulative impacts. However, a cumulative impact would remain.

22. I-110 Southbound Off-ramp & 190th Street. This intersection is projected to operate at LOS D, which meets the LACDPW minimum requirements for acceptable intersection operation. The significant cumulative impact at this intersection could be reduced to a less than significant level by providing an additional eastbound lane on 190th Street; this would allow access to the three existing receiving lanes on the eastbound departure of the intersection, of which the left-most lane functions as a left-turn lane at Intersection 21, I-110 Northbound On-ramp & 190th Street. The resulting eastbound approach of three through lanes could be accommodated by reducing the width of the existing painted median on 190th Street to accommodate the additional eastbound lane; however, this would require the installation of additional advance warning signage to indicate the trap lane condition, which may not be feasible due to overhead power lines and/or limited parkway for installation. Although the physical improvement described above could be accomplished through restriping, the physical requirements for the corresponding advance warning signage and the existing physical constraints could result in the improvement being determined infeasible. Pursuant to LACDPW policy, however, when an intersection is projected to exceed the significance criteria but still operate at a satisfactory LOS (LOS D or better), the County may direct that operational improvements be implemented for the

intersection rather than physical improvements. As such, per LACDPW direction, the intersection was evaluated for operational deficiencies by comparing the projected turning lane queue lengths under Future with Project conditions to the existing turning lane storage capacity at the intersection. Based on the results of the evaluation, no operational deficiencies were identified and, thus, no operational improvements are required.

24. Hamilton Avenue & Del Amo Boulevard. The significant cumulative transportation impact at this intersection could be reduced to a less than significant level with the reconfiguration of the northbound approach on Hamilton Avenue to provide a left-turn lane, through lane, and right-turn lane along with overlap operation for the northbound right-turn. Protected-permitted left-turn phasing also would be added to the westbound approach.

25. Hamilton Avenue & I-110 SB Ramps. The measure identified in the Existing with Project condition mitigates the Project impact to a less than significant condition and reduces the overall cumulative transportation impact at this intersection; no further cumulative measures are required to be implemented by the Project.

26. Figueroa Street & Del Amo Boulevard. The significant cumulative transportation impact at this intersection could be reduced with the reconfiguration of the westbound approach on Del Amo Boulevard to provide two left-turn lanes, one through lane, and one shared through/right-turn lane and the eastbound approach to provide a left-turn lane, two through lanes, and a through-right lane; the signal would also be modified to provide northbound and southbound right-turn overlap operation. The reconfigured westbound lanes could be accommodated by converting the existing through lane, adjacent to the raised median, to left-turn operation and converting the right-turn lane to a shared through/right-turn operation. The reconfigured eastbound lanes could be accommodated by restriping the existing through-right lane into a through lane and a through-right lane.

MITIGATION EFFECTIVENESS

Direct Project Impacts

Tables 11A and 11B summarize the mitigation effectiveness at the Project impacted intersections. Each proposed mitigation measure could reduce the direct Project impact to a less than significant level.

Mitigation Measures for Cumulative Impacts

Tables 12A and 12B summarize the mitigation effectiveness at the cumulatively impacted intersections. Of the 14 proposed mitigation measures, nine cumulative impacts are mitigated and the remaining five intersections (four during weekday conditions and two during Saturday conditions, of which one is already identified as impacted during the weekday) are reduced as identified below:

Mitigated Cumulative Impact

1. Main Street & Martin Luther King, Jr. Street (weekday afternoon and Saturday mid-day peak hours)
3. Main Street & I-405 Southbound On-ramp
7. Avalon Boulevard & Albertoni Street (direct Project impact mitigated)
8. Avalon Boulevard & Victoria Street
10. Avalon Boulevard & University Drive
22. I-110 Southbound Off-ramp & 190th Street
24. Hamilton Avenue & Del Amo Boulevard
25. Hamilton Avenue & I-110 Southbound Ramps (direct Project impact mitigated)
26. Figueroa Street & Del Amo Boulevard

Reduced Cumulative Impact

4. Main Street & Del Amo Boulevard (weekday morning peak hour cumulative impact mitigated and weekday afternoon peak hour impact reduced)

14. Avalon Boulevard & Del Amo Boulevard (weekday afternoon peak hour cumulative impact mitigated and weekday morning & Saturday mid-day peak hour cumulative impacts reduced)

16. Avalon Boulevard & I-405 Southbound Ramps (Saturday mid-day peak hour cumulative impact reduced)

18. Main Street & Albertoni Street (direct Project impact mitigated and weekday afternoon cumulative impact reduced)

19. Main Street & Victoria Street (direct Project impact mitigated and weekday afternoon cumulative impact reduced)

Per LACDPW guidelines, the Project is responsible for the identification of physical mitigation measures for cumulative impacts along with a proportionate share payment toward their implementation, if determined feasible. The requirement for a proportionate share payment is not required at locations where a Project mitigation measure mitigates a direct Project impact to a less than significant level.

As detailed above, mitigation measures for intersections located in other jurisdictions will require the approval of the respective jurisdiction.

TABLE 10
QUEUING ANALYSIS

No.	Intersection	Lane Description		Vehicle Storage Capcity (Ft)	Future with Project Conditions			
					Morning Peak Hour		Afternoon Peak Hour	
					Vehicle Queue Length	Exceeds Capacity?	Vehicle Queue Length	Exceeds Capacity?
8.	Avalon Boulevard & Victoria Street	NB	Left	194	79	NO	142	NO
		NB	Right	200	97	NO	188	NO
		SB	Left	212	92	NO	175	NO
		SB	Left	212	92	NO	175	NO
		EB	Left	135	52	NO	107	NO
		EB	Right	150	35	NO	113	NO
		WB	Left	200	71	NO	192	NO
		WB	Right	300	104	NO	251	NO
10.	Avalon Boulevard & University Drive	NB	Right	245	185	NO	177	NO
		SB	Left	162	68	NO	103	NO
		SB	Left	162	68	NO	103	NO
		WB	Left	300	110	NO	259	NO
		WB	Right	300	128	NO	104	NO
22.	I-110 SB Off-Ramp & 190th Street	SB	Left	295	52	NO	164	NO
		SB	Right	295	267	NO	219	NO

TABLE 11A
EXISTING WITH PROJECT WITH MITIGATION CONDITIONS (YEAR 2018) - WEEKDAY
INTERSECTION PEAK HOUR LEVELS OF SERVICE

No.	Signalized Intersection	Peak Hour	Existing Conditions		Existing with Project Conditions (Year 2018)				Existing with Project with Mitigation Conditions (Year 2018)			
			V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	Change in V/C Ratio	Significant Impact? [a]	V/C Ratio / Delay	LOS	Change in V/C Ratio	Significant Impact? [a]
1.	Main Street & MLK Jr Street	AM	0.415	A	0.471	A	0.056	NO				
		PM	0.524	A	0.617	B	0.093	NO				
2.	Main Street & I-405 NB Off-Ramp	AM	0.567	A	0.576	A	0.009	NO				
		PM	0.675	B	0.694	B	0.019	NO				
3.	Main Street & I-405 SB On-Ramp	AM	0.452	A	0.463	A	0.011	NO				
		PM	0.702	C	0.718	C	0.016	NO				
4.	Main Street & Del Amo Boulevard	AM	0.665	B	0.679	B	0.014	NO				
		PM	0.864	D	0.876	D	0.012	NO				
5.	Main Street & Torrance Boulevard	AM	0.622	B	0.626	B	0.004	NO				
		PM	0.754	C	0.757	C	0.003	NO				
6.	Avalon Boulevard & SR-91 WB On-Ramp	AM	0.546	A	0.547	A	0.001	NO				
		PM	0.570	A	0.573	A	0.003	NO				
7.	Avalon Boulevard & Albertoni Street	AM	0.647	B	0.649	B	0.002	NO	0.649	B	0.002	NO
		PM	0.843	D	0.865	D	0.022	YES	0.824	D	-0.019	NO
8.	Avalon Boulevard & Victoria Street	AM	0.590	A	0.595	A	0.005	NO				
		PM	0.736	C	0.751	C	0.015	NO				
9.	Avalon Boulevard & 184th Street-StubHub Center Gate	AM	0.392	A	0.395	A	0.003	NO				
		PM	0.469	A	0.484	A	0.015	NO				
10.	Avalon Boulevard & University Drive	AM	0.667	B	0.669	B	0.002	NO				
		PM	0.723	C	0.731	C	0.008	NO				
11.	Avalon Boulevard & MLK Jr Street	AM	0.418	A	0.434	A	0.016	NO				
		PM	0.592	A	0.639	B	0.047	NO				
12.	Avalon Boulevard & Elsmere Drive	AM	0.459	A	0.461	A	0.002	NO				
		PM	0.435	A	0.500	A	0.065	NO				
13.	Avalon Boulevard & Turmont Street	AM	0.520	A	0.522	A	0.002	NO				
		PM	0.494	A	0.504	A	0.010	NO				
14.	Avalon Boulevard & Del Amo Boulevard	AM	0.797	C	0.798	C	0.001	NO				
		PM	0.897	D	0.902	E	0.005	NO				
15.	Avalon Boulevard & I-405 NB Ramps	AM	0.470	A	0.470	A	0.000	NO				
		PM	0.508	A	0.511	A	0.003	NO				
16.	Avalon Boulevard & I-405 SB Ramps	AM	0.602	B	0.603	B	0.001	NO				
		PM	0.586	A	0.590	A	0.004	NO				
17.	Main Street & SR-91 WB Ramps	AM	0.624	B	0.632	B	0.008	NO				
		PM	0.581	A	0.592	A	0.011	NO				
18.	Main Street & Albertoni Street	AM	0.688	B	0.698	B	0.010	NO	0.698	B	0.010	NO
		PM	0.814	D	0.849	D	0.035	YES	0.803	D	-0.011	NO
19.	Main Street & Victoria Street	AM	0.525	A	0.547	A	0.022	NO	0.532	A	0.007	NO
		PM	0.736	C	0.777	C	0.041	YES	0.747	C	0.011	NO
20.	Figueroa Street & Victoria Street	AM	0.605	B	0.609	B	0.004	NO				
		PM	0.692	B	0.707	C	0.015	NO				
21.	I-110 NB On-Ramp & 190th Street	AM	0.353	A	0.358	A	0.005	NO				
		PM	0.471	A	0.483	A	0.012	NO				
22.	I-110 SB Off-Ramp & 190th Street	AM	0.769	C	0.772	C	0.003	NO				
		PM	0.802	D	0.809	D	0.007	NO				
23.	Central Avenue & Victoria Street	AM	0.799	C	0.800	C	0.001	NO				
		PM	0.736	C	0.739	C	0.003	NO				
24.	Hamilton Avenue & Del Amo Blvd	AM	0.546	A	0.547	A	0.001	NO				
		PM	0.768	C	0.778	C	0.010	NO				
25 [b].	Hamilton Avenue & I-110 SB Ramps	AM	40.0	E	40.6	E	0.6	[d]	8.8	A	-31.2	NO
		PM	81.8	F	86.7	F	4.9	[d]	7.3	A	-74.5	NO
[c]		AM	0.668	B	0.672	B	0.004	[d]	0.596	A	-0.072	NO
		PM	0.659	B	0.668	B	0.009	[d]	0.689	B	0.030	NO
26.	Figueroa Street & Del Amo Boulevard	AM	0.730	C	0.733	C	0.003	NO				
		PM	0.822	D	0.834	D	0.012	NO				
27.	Figueroa Street & I-110 NB Ramps	AM	0.698	B	0.700	B	0.002	NO				
		PM	0.705	C	0.711	C	0.006	NO				
28.	SR-91 EB Ramps & Albertoni Street	AM	0.551	A	0.552	A	0.001	NO				
		PM	0.621	B	0.621	B	0.000	NO				
29 [b].	Main Street & Broadway	AM	17.8	C	18.4	C	0.6	NO				
		PM	17.1	C	18.0	C	0.9	NO				
30.	New driveway & MLK Jr Street	AM	New Intersection		0.291	A	-	N/A				
		PM			0.453	A	-	N/A				
31.	Avalon Boulevard & New driveway	AM	New Intersection		0.378	A	-	N/A				
		PM			0.433	A	-	N/A				

AM - Weekday AM Peak Hour, PM - Weekday PM Peak Hour
[a] Significance based on County of Los Angeles Standards
[b] A signal warrant was performed to determine significant impacts for unsignalized intersections.
[c] Due to the shared jurisdiction, the intersection was analyzed using both HCM (Caltrans) and ICU (LACDPW) methodology
[d] Warrants were met under Existing, Existing with Project, and Future with Project Conditions

TABLE 11B
EXISTING WITH PROJECT WITH MITIGATION CONDITIONS (YEAR 2020) - SATURDAY
INTERSECTION PEAK HOUR LEVELS OF SERVICE

No.	Signalized Intersection	Peak Hour	Existing Conditions (Year 2018)		Existing with Project Conditions (Year 2018)				Existing with Project with Mitigation Conditions (Year 2018)			
			V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	Change in V/C Ratio	Significant Impact? [a]	V/C Ratio / Delay	LOS	Change in V/C Ratio	Significant Impact? [a]
1.	Main Street & MLK Jr Street	MD	0.303	A	0.447	A	0.144	NO				
2.	Main Street & I-405 NB Off-Ramp	MD	0.321	A	0.347	A	0.026	NO				
3.	Main Street & I-405 SB On-Ramp	MD	0.328	A	0.356	A	0.028	NO				
6.	Avalon Boulevard & SR-91 WB On-Ramp	MD	0.424	A	0.448	A	0.024	NO				
11.	Avalon Boulevard & MLK Jr Street	MD	0.396	A	0.419	A	0.023	NO				
12.	Avalon Boulevard & Elsmere Drive	MD	0.365	A	0.515	A	0.150	NO				
13.	Avalon Boulevard & Turmont Street	MD	0.436	A	0.470	A	0.034	NO				
14.	Avalon Boulevard & Del Amo Boulevard	MD	0.634	B	0.659	B	0.025	NO				
15.	Avalon Boulevard & I-405 NB Ramps	MD	0.528	A	0.543	A	0.015	NO				
16.	Avalon Boulevard & I-405 SB Ramps	MD	0.657	B	0.674	B	0.017	NO				
17.	Main Street & SR-91 WB Ramps	MD	0.277	A	0.295	A	0.018	NO				
18.	Main Street & Albertoni Street	MD	0.424	A	0.464	A	0.040	NO	0.449	A	0.025	NO
21.	I-110 NB On-Ramp & 190th Street	MD	0.353	A	0.362	A	0.009	NO				
22.	I-110 SB Off-Ramp & 190th Street	MD	0.603	B	0.614	B	0.011	NO				
28	SR-91 EB Ramps & Albertoni Street	MD	0.433	A	0.437	A	0.004	NO				
30.	New driveway & MLK Jr Street	MD	New Intersection		0.299	A	-	N/A				
31.	AvalonBoulevard & New driveway	MD	New Intersection		0.341	A	-	N/A				

MD - Saturday Midday Peak Hour
[a] Significance based on County of Los Angeles Standards

TABLE 12A
FUTURE WITH PROJECT WITH MITIGATION CONDITIONS (YEAR 2020) - WEEKDAY
INTERSECTION PEAK HOUR LEVELS OF SERVICE

No.	Signalized Intersection	Peak Hour	Existing Conditions		Future with Project Conditions (Year 2020)				Future with Project with Mitigation Conditions (Year 2020)			
			V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	Change in V/C Ratio	Significant Impact? [a]	V/C Ratio / Delay	LOS	Change in V/C Ratio	Significant Impact? [a]
1.	Main Street & MLK Jr Street	AM	0.415	A	0.638	B	0.223	NO	0.511	A	0.096	NO
		PM	0.524	A	0.885	D	0.361	YES	0.712	C	0.188	NO
2.	Main Street & I-405 NB Off-Ramp	AM	0.567	A	0.595	A	0.028	NO				
		PM	0.675	B	0.737	C	0.062	NO				
3.	Main Street & I-405 SB On-Ramp	AM	0.452	A	0.482	A	0.030	NO	0.462	A	0.010	NO
		PM	0.702	C	0.761	C	0.059	YES	0.681	B	-0.021	NO
4.	Main Street & Del Amo Boulevard	AM	0.665	B	0.764	C	0.099	YES	0.672	B	0.007	NO
		PM	0.864	D	1.017	F	0.153	YES	0.893	D	0.029	YES
5.	Main Street & Torrance Boulevard	AM	0.622	B	0.657	B	0.035	NO				
		PM	0.754	C	0.783	C	0.029	NO				
6.	Avalon Boulevard & SR-91 WB On-Ramp	AM	0.546	A	0.569	A	0.023	NO				
		PM	0.570	A	0.600	A	0.030	NO				
7.	Avalon Boulevard & Albertoni Street	AM	0.647	B	0.661	B	0.014	NO	0.661	B	0.014	NO
		PM	0.843	D	0.910	E	0.067	YES	0.854	D	0.011	NO
8.	Avalon Boulevard & Victoria Street	AM	0.590	A	0.627	B	0.037	NO	0.591	A	0.001	[e]
		PM	0.736	C	0.808	D	0.072	YES	0.772	C	0.036	[e]
9.	Avalon Boulevard & 184th Street-StubHub Center Gate	AM	0.392	A	0.417	A	0.025	NO				
		PM	0.469	A	0.524	A	0.055	NO				
10.	Avalon Boulevard & University Drive	AM	0.667	B	0.672	B	0.005	NO	0.672	B	0.005	[e]
		PM	0.723	C	0.775	C	0.052	YES	0.620	B	-0.103	[e]
11.	Avalon Boulevard & MLK Jr Street	AM	0.418	A	0.466	A	0.048	NO				
		PM	0.592	A	0.689	B	0.097	NO				
12.	Avalon Boulevard & Elsmere Drive	AM	0.459	A	0.488	A	0.029	NO				
		PM	0.435	A	0.543	A	0.108	NO				
13.	Avalon Boulevard & Turmont Street	AM	0.520	A	0.631	B	0.111	NO				
		PM	0.494	A	0.672	B	0.178	NO				
14.	Avalon Boulevard & Del Amo Boulevard	AM	0.797	C	0.916	E	0.119	YES	0.880	D	0.083	YES
		PM	0.897	D	0.999	E	0.102	YES	0.878	D	-0.019	NO
15.	Avalon Boulevard & I-405 NB Ramps	AM	0.470	A	0.511	A	0.041	NO				
		PM	0.508	A	0.594	A	0.086	NO				
16 [b].	Avalon Boulevard & I-405 SB Ramps	AM	0.602	B	0.663	B	0.061	NO	0.663	B	0.061	NO
		PM	0.586	A	0.641	B	0.055	NO	0.641	B	0.055	NO
17.	Main Street & SR-91 WB Ramps	AM	0.624	B	0.656	B	0.032	NO				
		PM	0.581	A	0.620	B	0.039	NO				
18.	Main Street & Albertoni Street	AM	0.688	B	0.723	C	0.035	NO	0.730	C	0.042	NO
		PM	0.814	D	0.927	E	0.113	YES	0.880	D	0.066	YES
19.	Main Street & Victoria Street	AM	0.525	A	0.642	B	0.117	NO	0.598	A	0.073	NO
		PM	0.736	C	0.934	E	0.198	YES	0.867	D	0.131	YES
20.	Figueroa Street & Victoria Street	AM	0.605	B	0.635	B	0.030	NO				
		PM	0.692	B	0.748	C	0.056	NO				
21.	I-110 NB On-Ramp & 190th Street	AM	0.353	A	0.388	A	0.035	NO				
		PM	0.471	A	0.525	A	0.054	NO				
22.	I-110 SB Off-Ramp & 190th Street	AM	0.769	C	0.802	D	0.033	NO	0.722	C	-0.047	[e]
		PM	0.802	D	0.838	D	0.036	YES	0.689	B	-0.113	[e]
23.	Central Avenue & Victoria Street	AM	0.799	C	0.809	D	0.010	NO				
		PM	0.736	C	0.763	C	0.027	NO				
24.	Hamilton Avenue & Del Amo Blvd	AM	0.546	A	0.607	B	0.061	NO	0.590	A	0.044	NO
		PM	0.768	C	0.949	E	0.181	YES	0.794	C	0.026	NO
25 [c].	Hamilton Avenue & I-110 SB Ramps	AM	40.0	E	55.7	F	15.7	[f]	9.7	A	-30.3	NO
		PM	81.8	F	133.5	F	51.7	[f]	9.2	A	-72.6	NO
[d]		AM	0.668	B	0.725	C	0.057	[f]	0.638	B	-0.030	NO
		PM	0.659	B	0.781	C	0.122	[f]	0.716	C	0.057	NO
26.	Figueroa Street & Del Amo Boulevard	AM	0.730	C	0.752	C	0.022	NO	0.747	C	0.017	NO
		PM	0.822	D	1.053	F	0.231	YES	0.715	C	-0.107	NO
27.	Figueroa Street & I-110 NB Ramps	AM	0.698	B	0.726	C	0.028	NO				
		PM	0.705	C	0.739	C	0.034	NO				
28.	SR-91 EB Ramps & Albertoni Street	AM	0.551	A	0.554	A	0.003	NO				
		PM	0.621	B	0.621	B	0.000	NO				
29 [c].	Main Street & Broadway	AM	17.8	C	19.1	C	1.3	NO				
		PM	17.1	C	20.0	C	2.9	NO				
30.	New driveway & MLK Jr Street	AM	New Intersection		0.401	A	-	N/A				
		PM			0.621	B	-	N/A				
31.	Avalon Boulevard & New driveway	AM	New Intersection		0.432	A	-	N/A				
		PM			0.633	B	-	N/A				

AM - Weekday AM Peak Hour, PM - Weekday PM Peak Hour
[a] Significance based on County of Los Angeles Standards
[b] Intersection is not impacted during the weekday analysis, but is impacted under the weekend analysis. Therefore, the proposed mitigation is shown in the "Cumulative Future with Project with Mitigation Condition" column.
[c] A signal warrant was performed to determine significant impacts for unsignalized intersections.
[d] Due to the shared jurisdiction, the intersection was analyzed using both HCM (Caltrans) and ICU (LACDPW) methodology
[e] With mitigation the impact is less than significant. However, the impact is at an acceptable LOS before mitigation and LACDPW may not require physical mitigation if further analysis does not identify operational deficiencies.
[f] Warrants were met under Existing, Existing with Project, and Future with Project Conditions

TABLE 12B
FUTURE WITH PROJECT WITH MITIGATION CONDITIONS (YEAR 2020) - SATURDAY
INTERSECTION PEAK HOUR LEVELS OF SERVICE

No.	Signalized Intersection	Peak Hour	Existing Conditions (Year 2018)		Future with Project Conditions (Year 2020)				Future with Project with Mitigation Conditions (Year 2020)			
			V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	Change in V/C Ratio	Significant Impact? [a]	V/C Ratio / Delay	LOS	Change in V/C Ratio	Significant Impact? [a]
1.	Main Street & MLK Jr Street	MD	0.303	A	0.820	D	0.517	YES	0.665	B	0.362	NO
2.	Main Street & I-405 NB Off-Ramp	MD	0.321	A	0.468	A	0.147	NO				
3.	Main Street & I-405 SB On-Ramp	MD	0.328	A	0.474	A	0.146	NO	0.452	A	0.124	NO
6.	Avalon Boulevard & SR-91 WB On-Ramp	MD	0.424	A	0.476	A	0.052	NO				
11.	Avalon Boulevard & MLK Jr Street	MD	0.396	A	0.493	A	0.097	NO				
12.	Avalon Boulevard & Elsmere Drive	MD	0.365	A	0.588	A	0.223	NO				
13.	Avalon Boulevard & Turmont Street	MD	0.436	A	0.628	B	0.192	NO				
14.	Avalon Boulevard & Del Amo Boulevard	MD	0.634	B	1.041	F	0.407	YES	0.919	E	0.285	YES
15.	Avalon Boulevard & I-405 NB Ramps	MD	0.528	A	0.722	C	0.194	NO				
16.	Avalon Boulevard & I-405 SB Ramps	MD	0.657	B	1.113	F	0.456	YES	0.912	E	0.255	YES
17.	Main Street & SR-91 WB Ramps	MD	0.277	A	0.357	A	0.080	NO				
18 [b].	Main Street & Albertoni Street	MD	0.424	A	0.596	A	0.172	NO	0.580	A	0.156	NO
21.	I-110 NB On-Ramp & 190th Street	MD	0.353	A	0.416	A	0.063	NO				
22 [b].	I-110 SB Off-Ramp & 190th Street	MD	0.603	B	0.640	B	0.037	NO	0.534	A	-0.069	NO
28	SR-91 EB Ramps & Albertoni Street	MD	0.433	A	0.443	A	0.010	NO				
30.	New driveway & MLK Jr Street	MD	New Intersection		0.740	C	-	N/A				
31.	Avalon Boulevard & New driveway	MD	New Intersection		0.613	B	-	N/A				

MD - Saturday Midday Peak Hour
[a] Significance based on County of Los Angeles Standards
[b] Although not impacted under Saturday conditions, the mitigation measure idnentified for the weekday analysis is applied.

Chapter 8
Special Event Management Plan

A Special Event Management Plan (SEMP) was developed to provide guidance for the management of traffic and parking operations during special events that might attract a larger number of visitors to the Project. This chapter describes the various components proposed for inclusion in the Project's SEMP, which is an operational project design feature. At a basic level, the purpose of any SEMP is to minimize the potential operational effects, on-site and off-site, associated with a large number of visitors entering and leaving a site for a special event.

As such, the major elements of the SEMP can be generally described as on-site and off-site measures, comprised of a combination of operational and physical components to appropriately manage event period traffic:

- On-site Measures: Physical Site Design/ Parking Operations/ Guest Communications
- Off-site Measures: Traffic Management / Traffic Control Officers/ Off-site Parking/ Transit Service Coordination / Schedule Coordination

The SEMP is intended to be an evolving document subject to modification over time in coordination and consultation with the County and other jurisdictions, in order to respond to changes in traffic patterns and mobility/parking technologies that may alter the travel to, and attendance of, special events at the Project.

ON-SITE MEASURES

The underlying question that the on-site measures intend to address is: "What does special event traffic do when it arrives on-site?" The measures identified below are available for use and anticipated to be applicable to special events held at either the Soccer Center or Tennis Center.

Physical Site Design

The physical site design, including the number of access points, internal circulation considerations, and location of drop-off/pick-up and parking areas, is integral to the implementation of the SEMP, as the intent is to quickly move event traffic off the public streets and into the Project site.

As illustrated in Figure 1, at full build-out, approximately one-third of the total parking supply (regular and overflow spaces) will be accessible from Martin Luther King, Jr. Street, with the remaining parking supply accessible from Elsmere Drive at Avalon Boulevard. Both primary driveways will continue to provide access from their respective streets to the Project site during special events.

During special events, access will be supplemented by allowing Project access from the employee driveway to the north. This driveway will provide access into the on-site overflow parking areas located along Avalon Boulevard, which will have internal links/drive aisles to effectively provide continuous access between the regular and overflow parking areas during events.

In addition to these access points, the primary Project driveways will be designed to provide multiple lanes for inbound/outbound access. In combination with the improvements on the public streets at the primary driveways and operational measures at all driveways, it is anticipated that Project traffic will be able to quickly move on- and off-site.

Another component to the physical site design is the location of drop-off/pick-up and bus zones across the site. A pick-up/drop-off location, specific to the Learning Center and Tennis Center, is anticipated to be located within the parking area at the northwest portion of the site; this is anticipated to be sufficient for operation of the academic center on a typical day. Similarly, the drop-off/pick-up area for the Soccer Center is anticipated to be located within the Avalon Boulevard parking area. On days with special events, the south curb of Martin Luther King, Jr. Street may be utilized as a bus zone for either the Soccer Center or Tennis Center.

Parking Operations

It is anticipated that during special events, on-site parking will be accessed without the need for entry transactions, which will accelerate the movement of vehicles into the parking facilities and reduce operational queuing and potential spillback onto public streets. Additionally, special event parking may be implemented through the assignment of parking with special event registrations and the establishment of zones, along with the use of traffic attendants to direct traffic within the parking areas. By assigning specific parking facilities, inbound special event traffic can be directed to use specific driveways, minimizing unnecessary circulation around the site.

The operational benefits for the inbound special event operations are similarly anticipated to be effective during outbound event operations. During outbound operations, internal traffic attendants and wayfinding signage will direct exiting vehicles to utilize specific driveways for specific directions of travel. Coordination between internal and external special event traffic control will also assist this process.

Guest Communications

Equally vital to the SEMP is the communication of event period information to guests before and after a special event.

As described above, with the advance registration for a special event, the location of assigned parking can be communicated to registrants. Preferred traffic routes to the assigned parking area can be provided at the time of registration and on event registration materials. Similarly, separate routing and parking directions can be created for event guests and announced through an event website or other means. At the end of an event, traffic announcements and updates can be made to event participants and guests before returning to their vehicles.

With the increasing use of mobile apps for driving directions, traffic information, and ridesharing services, coordination with these services can also facilitate the provision of event period information to a larger audience.

OFF-SITE MEASURES

The overall consideration of the off-site SEMP measures is “How does special event traffic get to the site and leave the site?” These off-site measures would be the key component of the SEMP, as the inbound and outbound flow of special event traffic can be directly affected. While the measures below are individually applicable to special events held by either the Soccer Center or Tennis Center, the combination of measures selected for a special event will largely be determined by the special event characteristics and/or anticipated attendance.

Traffic Management

Based on the intersection LOS analyses discussed in previous chapters, traffic management measures were developed to minimize the effects of special event traffic. This includes the identification of specific routing to distribute special event traffic away from already congested locations along with the use of changeable message signs at select freeway and arterial locations to communicate the preferred routing to the Project site. The use of Changeable Message Signs along the freeway would require the review and approval of other jurisdictions, such as Caltrans, in addition to any approvals the City of Carson or City of Los Angeles may require for the use of Changeable Message Signs along their arterial streets.

Coordinated Traffic Control

Traffic control adjacent to the Project site includes the use of both operational and physical measures (i.e., Changeable Message Signs). From an operational perspective, the SEMP may include coordination between the special event operator/internal traffic attendants and the County Sheriff’s Department, which will oversee and/or implement special event traffic operations.

In addition to the Project specific coordinated traffic control, coordination with other special event venues (i.e., Stub Hub Center, California State University, Dominguez Hills) may be necessary depending on the Project’s special event type/attendance. This is anticipated to

include coordination on special event scheduling (i.e., event hours, event overlap, etc.) of operation as well as overall traffic control measures.

Traffic Control Officers

Traffic Control Officers (TCOs) may be deployed to selected locations, on an as needed basis, for the purposes of directing traffic during some special events. During the before and after special event conditions, the TCOs would be able to modify/override the signal timing or lane configuration at the selected intersection(s) to facilitate operations. The effectiveness of the TCOs is estimated to provide an effective capacity increase of approximately 3-5% before any temporary lane reconfiguration. Locations anticipated for TCO deployment for some special events may include:

11. Avalon Boulevard & Martin Luther King, Jr. Street
12. Avalon Boulevard & Elsmere Drive
30. New Driveway & Martin Luther King, Jr. Street
31. Avalon Boulevard & New Driveway

Further coordination between the special event operators and the applicable jurisdictions would determine any additional locations that may require TCO deployment based on the event characteristics and/or anticipated attendance.

Schedule Coordination

As the Project shares a boundary with the event management area of the Stub Hub Center, schedule coordination is anticipated to be an element to effectively managing special event traffic. This coordination is anticipated to consist of Project scheduling staff coordinating with the Stub Hub Center scheduling staff to minimize overlapping Project special events with large events at the Stub Hub Center, where possible, and to ensure that the Stub Hub Center event management plan can implement the appropriate off-site measures if overlapping events were to occur.

SEMP LEVELS

As described in Chapter 3, with the development of the Project trip generation estimates, the Saturday operation of the Project site includes the full use of the Soccer Center under tournament conditions along with the full use of the Tennis Center under tournament conditions; this effectively represents a base operating condition for the Saturday analysis. As summarized in Chapters 4 and 5, the Saturday operating conditions are not projected to result in significant impacts to the street network, after mitigation. Although tournaments are anticipated to regularly occur at the Project site, the implementation of the SEMP would not be necessary under typical operating conditions.

The following thresholds are recommended for implementation of the SEMP:

1. All on-site measures to be implemented during:

    a. Weekend Soccer Center tournament and weekend Tennis Center tournament operating simultaneously

2. All on-site measures and selected off-site measures, as identified through coordination with the lead agency during:

    a. Weekend Soccer Center tournament and weekend Tennis Center tournament operating simultaneously plus the full use of the Tennis Center exhibition venue

    OR

    b. The scheduling of a special event at the Soccer Center (e.g., professional sports exhibition, etc.)

Chapter 9
Congestion Management Program Analysis

This chapter presents an analysis of the regional transportation facilities in the vicinity of the Project site, in accordance with the procedures outlined in the 2010 CMP.

TRAFFIC IMPACT ANALYSIS GUIDELINES

The CMP requires that TIAs be performed on three types of facilities:

- Arterial Intersections
- Mainline Freeway Segments
- The Public Transit System

The CMP identifies specific arterial and freeway mainline locations for analysis.

Arterial Monitoring Intersection TIA Guidelines

The CMP requires that a TIA be performed for all CMP arterial monitoring intersections where a project would add 50 or more trips during either the weekday morning or afternoon peak hours. A detailed analysis is not required if the project adds fewer than 50 trips to an arterial monitoring intersection. The CMP analysis uses the same ICU methodology as used in earlier chapters to determine intersection V/C ratio and LOS. A significant impact requiring mitigation occurs if project traffic causes an incremental increase in intersection V/C ratio of 0.02 or greater to a facility projected to operate at LOS F (V/C > 1.00) after the addition of project traffic.

Mainline Freeway Monitoring Location TIA Guidelines

The CMP requires that a TIA be performed for all CMP mainline freeway monitoring locations where a project would add 150 or more trips (in either direction) during the weekday morning or afternoon peak hours. A detailed analysis is not required if the project adds fewer than 150 trips to a mainline freeway monitoring location (in either direction) during either the weekday morning or afternoon peak hour. The CMP analysis uses a demand-to-capacity (D/C) ratio to determine facility LOS based on capacity identified in Appendix A of the CMP. Similar to arterial monitoring intersections, a significant impact requiring mitigation occurs if project traffic causes an incremental increase in intersection V/C ratio of 0.02 or greater to a facility projected to operate at LOS F (D/C > 1.00) after the addition of project traffic.

Transit Impact Review Guidelines

The CMP requires that a transit system analysis be performed to determine whether a project would increase transit ridership beyond the current capacity of the transit system.

ARTERIAL MONITORING STATION ANALYSIS

The CMP identifies one arterial monitoring intersection within the Study Area, at Vermont Avenue & Artesia Boulevard. No other CMP arterial monitoring intersections are located within 2.0 miles of the Project site.

The morning and afternoon peak hour traffic for Vermont Avenue & Artesia Boulevard was calculated based on the number of trips entering and leaving SR 91 to the northwest of the Project site in the direction of the outlying CMP arterial monitoring intersections, conservatively assuming there would be no diverging trips.

Based on this methodology, the number of peak hour Project trips expected at the arterial monitoring intersection is:

Intersection	Peak Hour Trips		Requires CMP Analysis?
	AM	PM	
Vermont Avenue & Artesia Boulevard	11	27	No

The Project would add fewer than 50 peak hour trips at the arterial monitoring intersections nearest the Project Study Area. Therefore, the Project's CMP arterial intersection impacts are considered to be less than significant and no further analysis is required.

FREEWAY SEGMENT ANALYSIS

The CMP identifies one freeway mainline monitoring location within 2.0 miles of the Project Study Area. The closest monitoring location is located at:

- I-405 south of I-110 at Carson Scales (0.5 miles south of the Project site)

As conducted in the arterial monitoring analysis, the morning and afternoon peak hour traffic was calculated based on the number of trips running through the monitoring station, conservatively assuming there would be no diverging trips. The Project is projected to add the following trips to the freeway monitoring location during the morning and afternoon peak hours:

Freeway Segment	Direction	AM Peak Hour	PM Peak Hour	Requires CMP Analysis?
I-405 south of I-110 at Carson Scales	NB	9	14	No
	SB	8	15	No

As detailed above, the Project would add fewer than 150 peak hour trips in each direction during both the morning and afternoon peak hours at the mainline freeway monitoring location. Therefore, the Project's CMP mainline freeway impacts are considered to be less than significant and no further analysis is required.

REGIONAL TRANSIT IMPACT ANALYSIS

Section B.8.4 of the CMP provides a methodology for estimating the number of transit trips expected to result from a proposed project based on the number of vehicle trips. This methodology assumes average vehicle occupancy (AVO) of 1.4 in order to estimate the number of person trips to and from the Project and guidance regarding the percentage of Project person trips that may use public transit to travel to and from the Project site depending on the mix of uses and proximity to transit. As shown in the trip generation estimates in Table 6, to be conservative, no Project trip reduction for trips made via non-auto travel modes (e.g., bus, bicycle, walk, etc.) was taken for this analysis.

Although no transit trip credit was taken for the Project, 5% transit ridership was conservatively assumed for the CMP analysis. As shown in Table 6, accounting for Project trips traveling via non-auto modes, the Project is anticipated to generate 190 net new weekday morning peak hour trips and 437 net new weekday afternoon peak hour trips. Assuming an AVO of 1.4, the Project vehicle trips result in an estimated increase of 266 person trips during the weekday morning peak hour and 612 person trips during the weekday afternoon peak hour. Using the 5% non-auto mode split, the Project would generate approximately 13 new transit trips during the weekday morning peak hour and 31 new transit trips during the weekday afternoon peak hour.

As detailed in Chapter 2, the Study Area is served by numerous established transit routes. As shown in Tables 4A and 4B, the total residual capacity of the Metro bus lines with stops within walking distance of the Project Site is approximately 301 person trips in the morning peak hour and 202 person trips in the afternoon peak hour. This does not include additional residual transit capacity on buses operated by the City of Carson or Long Beach Transit. The Project's peak hour person trips by transit are projected to be lower than the available transit in the Study Area, as detailed in Tables 4A and 4B.

Although the Project (and other Related Projects) will cumulatively add transit ridership, the Project Site and Study Area are served by numerous transit lines. As such, the overall transit capacity in the Study Area can accommodate the Project's transit trips. Therefore, the Project is not anticipated to result in material regional transit impacts.

Furthermore, Los Angeles County voters approved Measure R, a half-cent sales tax increase for transportation, which has allowed Metro to develop projects to improve the existing transportation system. *2009 Long Range Transportation Plan* (Metro, Adopted 2009) (2009 LRTP), which outlined a range of transit and highway projects throughout Los Angeles County that were aimed to improve mobility and address future growth, is currently in the process of an update to address transportation issues and projects identified by local jurisdictions, Councils of Governments, and transportation agencies. *2014 Short Range Transportation Plan* (Metro, Adopted 2014) identifies projects and programs that will be implemented in accordance with the Project priorities and funding schedules of the 2009 LRTP. It is recognized that with these plans in place, Metro will continue to maintain and expand regional transit service in order to accommodate cumulative demand in the region. Although the Project (and other related projects) will cumulatively add transit ridership, Metro will continue to maintain and expand regional transit service to accommodate cumulative demand in the region; therefore, cumulative impacts on public transit are considered to be less than significant.

Chapter 10
Supplemental Caltrans Analysis

This Chapter presents an analysis of Caltrans facilities, including freeway mainline segments, Caltrans intersections, and off-ramp queuing to provide further information to the decision makers.

As detailed in Chapter 1, under SB 743, the focus of transportation analysis will shift from driver delay to VMT, reduction of GHG, creation of multimodal networks, and promotion of mixed-use developments. To better align with the State's multimodal transportation and environmental action goals, Caltrans is also pursuing VMT as a metric of Project impacts, as outlined in the Caltrans Interim Guide. This interim guidance will remain in effect until superseded by new Caltrans transportation impact study guidelines, which are currently under development.

CALTRANS METHODOLOGY

The Caltrans Interim Guide suggests the approach with which Caltrans can recommend improvements to enhance pedestrian safety and increase pedestrian accessibility to help meet the goals and targets of *Caltrans Strategic Management Plan 2015-2020* (Caltrans, March 2015) (SMP) and *California Transportation Plan 2040* (Caltrans, June 2016). The Caltrans Interim Guide directs lead agencies to consider "multi-modal solutions from existing regional transportation plans, regional plans, transit plans, bicycle plans, and pedestrian plans."

To provide further information to the decision makers, this analysis on Caltrans facilities was conducted using HCM methodology for informational purposes. The analyses results are summarized below, with supporting data provided in Appendix H.

ANALYZED FACILITIES

As shown in Table 13, the analyses conducted on Caltrans facilities included freeway mainline segments, signalized and unsignalized ramp intersections, and off-ramp queuing. Six freeway mainline segments on I-405, three freeway mainline segments on SR 91, and four freeway mainline segments on I-110 were analyzed using HCM methodology to determine density, speed, and LOS. One unsignalized and 10 signalized intersections, all freeway ramp locations, were analyzed using HCM methodology to identify vehicle delay and LOS. Three freeway off-ramps along I-405, three freeway off-ramps along SR 91, and three freeway off-ramps along I-110 were analyzed for ramp queue lengths, using Vistro software to estimate queues. LOS worksheets for each type of analysis are provided in Appendix H.

This analysis reviewed the potential Project-generated traffic impacts on Caltrans facilities as compared to Existing Conditions (Year 2018) and projected Future Conditions at the time the Project is anticipated to be occupied (year 2020).

FREEWAY MAINLINE SEGMENTS

Six freeway mainline segments on I-405, three freeway mainline segments on SR 91, and four freeway mainline segments on I-110 were analyzed using HCM methodology. The LOS definitions for freeway mainline segments are presented in Table 14.

Freeway Mainline Segment Analysis

Existing freeway volumes were based on traffic volume data for an average weekday in *2017 Traffic Volumes on California State Highways* (Caltrans, 2018), which consists of the annual average daily traffic (AADT) volumes, as well as the two-way peak hour percent of AADT factor and the percent of traffic in the peak direction factor used to develop peak hour volumes, were utilized. Future traffic volumes were projected for year 2020 to reflect the Project buildout year. The existing traffic volumes were increased by both ambient growth (assumed to be 1% total) and Related Project traffic. The freeway mainline segment volumes are summarized in Table 15.

Table 16 summarizes the results of the HCM analysis for Existing Conditions and Existing with Project Conditions. Table 17 summarizes the results of the HCM analysis for Future without Project Conditions and Future with Project Conditions. Given the operating conditions projected for the freeway mainline segments in the future and that there is no Caltrans specific incremental criteria by which to measure the significance of impacts to freeway mainline segments or intersections with ramp termini, the Project's contribution to traffic growth and its effect on operating conditions were analyzed. It was conservatively assumed that the Project would significantly impact a freeway segment if the addition of Project traffic to these segments would increase the traffic volumes by more than 2%. Since the addition of Project traffic to these freeway mainline segments is less than 2%, the Project would have a less than significant impact on all freeway mainline segments under Existing with Project Conditions and Future with Project Conditions.

INTERSECTIONS

As shown in Table 13, this Caltrans analysis focuses on one unsignalized and 10 signalized freeway ramp locations at I-405, SR 91, and I-110.

As described in Chapter 7, as a result of potential significant impacts identified using County significance criteria, the Project identified mitigation measures that would reduce significant Project impacts to a less than significant level at the study intersections.

The intersections under Caltrans jurisdiction were further analyzed using the HCM methodology and implemented using the Vistro software. Table 18 summarizes the LOS definitions for signalized and unsignalized intersections under the HCM methodology.

Intersection Analysis

The analysis of year 2018 conditions was conducted using existing traffic volumes utilized for the Existing Conditions analysis as presented in the study. Future traffic volumes for year 2020 were developed by increasing the existing traffic volumes with both ambient growth (assumed to be 1% total) and Related Project traffic. Tables 19A and 19B, respectively, summarize the

results of the HCM analysis of Existing Conditions and Existing with Project Conditions at the signalized and unsignalized intersections. Tables 20A and 20B similarly summarize the results of the HCM analysis of Future without and with Project Conditions at the signalized and unsignalized intersections. The signalized ramp intersections are anticipated to operate at LOS C or better under all conditions, regardless of the addition of Project traffic. The unsignalized ramp intersection at Hamilton Avenue & I-110 Southbound Ramps is anticipated to operate at LOS E during the morning peak hour and LOS F during the afternoon peak hour under Existing Conditions and at LOS F during both morning and afternoon peak hours under Future Conditions, regardless of the addition of Project traffic. The Project was determined to have a significant impact without mitigation on this intersection under County significance criteria.

OFF-RAMP QUEUES

Three freeway off-ramps along I-405, three freeway off-ramps along SR 91, and three freeway off-ramps along I-110 were analyzed to determine whether the lengths of the ramps were sufficient to accommodate vehicle queue lengths. The queue lengths were estimated using Vistro, which reports the 95th percentile queue length for each approach lane on the off-ramp.

The assessment of the off-ramps included a review of the vehicle queue length as compared to the total available queuing capacity of the ramp to determine whether the vehicle queue would extend beyond the length of the ramp onto the mainline. To this end, the queuing analysis looked at two separate components of ramp capacity: the length of each approach lane to the intersection and the remaining length of the ramp, behind any approach lane delineation lines, to the gore point where the ramp diverges from the freeway mainline. The queue may exceed the striped length of a given approach lane, but as long as there is sufficient additional queuing capacity on the ramp, it will not spill over onto the mainline.

Off-Ramp Queue Analysis

The analysis of year 2018 was conducted using the existing traffic volumes utilized for the Existing Conditions analysis. Table 21 summarizes the results of the queuing analysis for Existing Conditions and Existing with Project Conditions for year 2018. Future traffic volumes for

year 2020 traffic volumes were developed by increasing the existing traffic volumes by both ambient growth (assumed to be 1% total) and Related Project traffic. Table 22 summarizes the results of the queuing analysis for Future without Project Conditions and Future with Project Conditions for year 2020. The queues at all eight off-ramps do not extend beyond the available capacity under all conditions, without and with the addition of Project traffic. The addition of Project traffic does not substantially increase the off-ramp queue under any of the conditions tested above (less than one vehicle length during any of the scenarios tested) with exception of the SR 91 eastbound off-ramp at Albertoni Street during the morning peak hour, where the Project would increase the off-ramp queues by six vehicle lengths in the left-turn lane and seven vehicles lengths in the right-turn lane. However, the increased queues are not projected to exceed the existing storage lane capacities. Therefore, the Project would have a less-than-significant impact on off-ramp queuing.

TABLE 13
ANALYZED CALTRANS FACILITIES

ID	Location
Freeway Mainline Segments	
FS-1.	SR 91 Between I-110 and Avalon Boulevard
FS-2.	SR 91 Between Avalon Boulevard and Central Avenue
FS-3.	SR 91 Between Central Avenue and Wilmington Avenue
FS-4.	I-110 Between Carson Street and Torrance Boulevard
FS-5.	I-110 Between Torrance Boulevard and I-405
FS-6.	I-110 Between I-405 and SR 91
FS-7.	I-110 Between SR-91 and Redondo Beach Boulevard
FS-8.	I-405 Between Wilmington Avenue & Carson Street
FS-9.	I-405 Between Carson Street and Avalon Boulevard
FS-10.	I-405 Between Avalon Boulevard and I-110
FS-11.	I-405 Between I-110 and Vermont Avenue
FS-12.	I-405 Between Vermont Avenue and Normandie Avenue
FS-13.	I-405 Between Normandie Avenue and Western Avenue
Signalized Ramp Intersections	
S-1.	Main Street & I-405 NB Off-Ramp (Intersection #2)
S-2.	Main Street & I-405 SB Off-Ramp (Intersection #3)
S-3.	Avalon Boulevard & SR 91 WB On-Ramp (Intersection #6)
S-4.	Avalon Boulevard & I-405 NB Ramps (Intersection #15)
S-5.	Avalon Boulevard & I-405 SB Ramps (Intersection #16)
S-6.	Main Street & SR 91 WB Ramps (Intersection #17)
S-7.	I-110 NB On-Ramp & 190th St (Intersection #21)
S-8.	I-110 SB Off-Ramp & 190th Street (Intersection #22)
S-9.	Figueroa Street & I-110 NB Ramps (Intersection #27)
S-10.	SR 91 EB Ramps & Albertoni Street (Intersection #28)
Unsignalized Ramp Intersections	
U-1.	Hamilton Avenue & I-110 SB Ramps (Intersection #25)
Off-Ramp Queues	
Q-1.	I-405 Northbound Off-Ramp to Main Street (Intersection #2)
Q-2.	I-405 Northbound Off-Ramp to Avalon Boulevard (Intersection #15)
Q-3.	I-405 Southbound Off-Ramp to Avalon Boulevard (Intersection #16)
Q-4.	SR 91 Westbound Off-Ramp to Main Street (Intersection #17)
Q-5.	I-110 Southbound Off-Ramp to 190th Street (Intersection #22)
Q-6.	I-110 Southbound Off-Ramp to Hamilton Avenue (Intersection #25)
Q-7.	I-110 Northbound Off-Ramp to Figueroa Street (Intersection #27)
Q-8.	SR 91 Eastbound Off-Ramp to Albertoni Street (Intersection #28)

TABLE 14
LEVEL OF SERVICE DEFINITIONS FOR FREEWAY SEGMENTS

Level of Service	Description	Density [a]
A	Free-flow speeds prevail. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream.	≤ 11
B	Free-flow speeds are maintained. The ability to maneuver with the traffic stream is only slightly restricted.	> 11 and ≤ 18
C	Flow with speeds at or near free-flow speeds. Freedom to maneuver within the traffic stream is noticeably restricted, and lane changes require more care and vigilance on the part of the driver.	> 18 and ≤ 26
D	Speeds decline slightly with increasing flows. Freedom to maneuver with the traffic stream is more noticeably limited, and the driver experiences reduced physical and psychological comfort.	> 26 and ≤ 35
E	Operation at capacity. There are virtually no usable gaps within the traffic stream, leaving little room to maneuver. Any disruption can be expected to produce a breakdown with queuing.	> 35 and ≤ 45
F	Represents a breakdown in flow and oversaturated conditions.	> 45

Notes

Source: *Highway Capacity Manual, 6th Edition, A Guide for Multimodal Mobility Analysis* (Transportation Research Board, 2016) and Caltrans.

[a] Density is defined in vehicles per mile per lane and describes the proximity to other vehicles and is related to the freedom to maneuver within the traffic stream (*Highway Capacity Manual, 6th Edition, A Guide for Multimodal Mobility Analysis).*

TABLE 15
FREEWAY MAINLINE SEGMENT TRAFFIC VOLUMES

ID	Freeway Mainline Segment	Peak Hour	Direction	Vehicles per Hour (VPH)			
				Existing Conditions (Year 2018) [a]	Existing with Project Conditions (Year 2018)	Future without Project Conditions (Year 2020)	Future with Project Conditions (Year 2020)
FS-1.	SR-91 Between I-110 and Avalon Boulevard	AM Peak Hour	EB	5282	5302	5297	5317
			WB	8467	8483	8489	8505
		PM Peak Hour	EB	7649	7695	7663	7709
			WB	6299	6336	6348	6385
FS-2.	SR-91 Between Avalon Boulevard and Central Avenue	AM Peak Hour	EB	5390	5395	5396	5401
			WB	8638	8644	8655	8661
		PM Peak Hour	EB	7804	7816	7850	7862
			WB	6427	6442	6451	6466
FS-3.	SR-91 Between Central Avenue and Wilmington Avenue	AM Peak Hour	EB	5497	5502	5503	5508
			WB	8810	8816	8873	8879
		PM Peak Hour	EB	7960	7972	8006	8018
			WB	6555	6570	6621	6636
FS-4.	I-110 Between Carson Street and Torrance Boulevard	AM Peak Hour	NB	9027	9034	9078	9085
			SB	6645	6651	6693	6699
		PM Peak Hour	NB	6293	6310	6379	6396
			SB	8686	8700	8771	8785
FS-5.	I-110 Between Torrance Boulevard and I-405	AM Peak Hour	NB	9548	9548	9643	9643
			SB	7028	7028	7115	7115
		PM Peak Hour	NB	6656	6656	6815	6815
			SB	9187	9187	9377	9377
FS-6.	I-110 Between I-405 and SR 91	AM Peak Hour	NB	11761	11765	11862	11866
			SB	8658	8663	8801	8806
		PM Peak Hour	NB	8198	8208	8395	8405
			SB	11317	11329	11531	11543
FS-7.	I-110 Between SR-91 and Redondo Beach Boulevard	AM Peak Hour	NB	10503	10518	10638	10653
			SB	7731	7736	7867	7872
		PM Peak Hour	NB	7321	7356	7584	7619
			SB	10106	10118	10320	10332

TABLE 15 (CONTINUED)
FREEWAY MAINLINE SEGMENT TRAFFIC VOLUMES

ID	Freeway Mainline Segment	Peak Hour	Direction	Vehicles per Hour (VPH)			
				Existing Conditions (Year 2018) [a]	Existing with Project Conditions (Year 2018)	Future without Project Conditions (Year 2020)	Future with Project Conditions (Year 2020)
FS-8.	I-405 Between Wilmington Avenue & Carson Street	AM Peak Hour	NB	8989	8999	9129	9139
			SB	7375	7383	7447	7455
		PM Peak Hour	NB	8181	8206	8435	8460
			SB	9330	9349	9471	9490
FS-9.	I-405 Between Carson Street and Avalon Boulevard	AM Peak Hour	NB	8850	8860	8968	8978
			SB	7261	7269	7333	7341
		PM Peak Hour	NB	8054	8079	8309	8334
			SB	9185	9204	9326	9345
FS-10.	I-405 Between Avalon Boulevard and I-110	AM Peak Hour	NB	9477	9479	9563	9565
			SB	7776	7778	7863	7865
		PM Peak Hour	NB	8625	8629	8718	8722
			SB	9836	9841	10015	10020
FS-11.	I-405 Between I-110 and Vermont Avenue	AM Peak Hour	NB	9581	9583	9667	9669
			SB	7861	7863	7937	7939
		PM Peak Hour	NB	8720	8724	8813	8817
			SB	9945	9950	10091	10096
FS-12.	I-405 Between Vermont Avenue and Normandie Avenue	AM Peak Hour	NB	9930	9932	10016	10018
			SB	8147	8149	8223	8225
		PM Peak Hour	NB	9037	9041	9130	9134
			SB	10306	10311	10452	10457
FS-13.	I-405 Between Normandie Avenue and Western Avenue	AM Peak Hour	NB	9303	9305	9389	9391
			SB	7633	7635	7709	7711
		PM Peak Hour	NB	8467	8471	8560	8564
			SB	9655	9660	9801	9806

Notes
[a] Existing traffic volume based on average weekday peak hour data from *2017 Traffic Volumes on California State Highways (Caltrans; 2018).*

TABLE 16
EXISTING CONDITIONS (YEAR 2018)
FREEWAY SEGMENT LEVEL OF SERVICE ANALYSIS

ID	Freeway Segment	Peak Hour	Direction	Existing Conditions			Existing with Project Conditions		
				Speed [a][b]	Density [b][c]	LOS	Speed [a][b]	Density [b][c]	LOS
FS-1.	SR 91 Between I-110 and Avalon Boulevard	AM	EB	64	18	B	64	18	B
			WB	62	30	D	62	30	D
		PM	EB	63	26	D	63	26	D
			WB	64	21	C	64	21	C
FS-2.	SR 91 Between Avalon Boulevard and Central Avenue	AM	EB	64	18	C	64	18	C
			WB	61	31	D	61	31	D
		PM	EB	63	27	D	63	27	D
			WB	64	22	C	64	22	C
FS-3.	SR 91 Between Central Avenue and Wilmington Avenue	AM	EB	64	19	C	64	19	C
			WB	61	32	D	61	32	D
		PM	EB	63	28	D	63	28	D
			WB	64	22	C	64	22	C
FS-4.	I-110 Between Carson Street and Torrance Boulevard	AM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	62	29	D	62	29	D
		PM	NB	63	27	D	63	27	D
			SB	Overflow	Overflow	F	Overflow	Overflow	F
FS-5.	I-110 Between Torrance Boulevard and I-405	AM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	61	31	D	61	31	D
		PM	NB	62	29	D	62	29	D
			SB	Overflow	Overflow	F	Overflow	Overflow	F
FS-6.	I-110 Between I-405 and SR 91	AM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	Overflow	Overflow	F	Overflow	Overflow	F
		PM	NB	55	41	E	55	41	E
			SB	Overflow	Overflow	F	Overflow	Overflow	F
FS-7.	I-110 Between SR 91 and Redondo Beach Boulevard	AM	NB	54	43	E	54	43	E
			SB	63	27	D	63	27	D
		PM	NB	64	25	C	64	25	C
			SB	56	39	E	56	40	E
FS-8.	I-405 Between Wilmington Avenue & Carson Street	AM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	59	34	D	59	34	D
		PM	NB	55	40	E	55	41	E
			SB	Overflow	Overflow	F	Overflow	Overflow	F
FS-9.	I-405 Between Carson Street and Avalon Boulevard	AM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	60	33	D	60	33	D
		PM	NB	56	39	E	56	39	E
			SB	Overflow	Overflow	F	Overflow	Overflow	F
FS-10.	I-405 Between Avalon Boulevard and I-110	AM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	57	37	E	57	37	E
		PM	NB	52	45	E	52	45	E
			SB	Overflow	Overflow	F	Overflow	Overflow	F
FS-11.	I-405 Between I-110 and Vermont Avenue	AM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	57	37	E	57	37	E
		PM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	Overflow	Overflow	F	Overflow	Overflow	F
FS-12.	I-405 Between Vermont Avenue and Normandie Avenue	AM	NB	57	38	E	57	38	E
			SB	55	40	E	55	40	E
		PM	NB	60	33	D	60	33	D
			SB	Overflow	Overflow	F	Overflow	Overflow	F
FS-13.	I-405 Between Normandie Avenue and Western Avenue	AM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	58	36	E	58	36	E
		PM	NB	53	43	E	53	43	E
			SB	Overflow	Overflow	F	Overflow	Overflow	F

Notes

Overflow: Traffic demand exceeds the available capacity of the freeway mainline segment .

[a] Mean speed measured in miles per hour (mph).

[b] Methodology from *Highway Capacity Manual, 6th Edition, A Guide for Multimodal Mobility Analysis* (Transportation Research Board, 2016).

[c] Measured in vehicles per mile per lane (v/m/l) for freeways with a free-flow speed of 58.2 mph. Free-flow speed, as defined in HCM 6th Edition, is the theoretical speed when the density and flow rate of the freeway mainline segment are both zero.

TABLE 17
FUTURE CONDITIONS (YEAR 2020)
FREEWAY SEGMENT LEVEL OF SERVICE ANALYSIS

ID	Freeway Segment	Peak Hour	Direction	Future without Project Conditions			Future with Project Conditions		
				Speed [a][b]	**Density** [b][c]	**LOS**	**Speed** [a][b]	**Density** [b][c]	**LOS**
FS-1.	SR 91 Between I-110 and Avalon Boulevard	AM	EB	64	18	B	64	18	B
			WB	62	30	D	62	30	D
		PM	EB	63	26	D	63	26	D
			WB	64	22	C	64	22	C
FS-2.	SR 91 Between Avalon Boulevard and Central Avenue	AM	EB	64	18	C	64	18	C
			WB	61	31	D	61	31	D
		PM	EB	63	27	D	63	27	D
			WB	64	22	C	64	22	C
FS-3.	SR 91 Between Central Avenue and Wilmington Avenue	AM	EB	64	19	C	64	19	C
			WB	61	32	D	61	32	D
		PM	EB	63	28	D	63	28	D
			WB	64	22	C	64	22	C
FS-4.	I-110 Between Carson Street and Torrance Boulevard	AM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	62	29	D	62	29	D
		PM	NB	63	28	D	63	28	D
			SB	Overflow	Overflow	F	Overflow	Overflow	F
FS-5.	I-110 Between Torrance Boulevard and I-405	AM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	61	32	D	61	32	D
		PM	NB	62	30	D	62	30	D
			SB	Overflow	Overflow	F	Overflow	Overflow	F
FS-6.	I-110 Between I-405 and SR 91	AM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	Overflow	Overflow	F	Overflow	Overflow	F
		PM	NB	54	42	E	54	43	E
			SB	Overflow	Overflow	F	Overflow	Overflow	F
FS-7.	I-110 Between SR 91 and Redondo Beach Boulevard	AM	NB	53	44	E	53	44	E
			SB	63	27	D	63	27	D
		PM	NB	64	26	C	64	26	C
			SB	55	41	E	55	41	E
FS-8.	I-405 Between Wilmington Avenue & Carson Street	AM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	59	34	D	59	34	D
		PM	NB	53	43	E	53	43	E
			SB	Overflow	Overflow	F	Overflow	Overflow	F
FS-9.	I-405 Between Carson Street and Avalon Boulevard	AM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	60	33	D	60	33	D
		PM	NB	54	42	E	54	42	E
			SB	Overflow	Overflow	F	Overflow	Overflow	F
FS-10.	I-405 Between Avalon Boulevard and I-110	AM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	57	37	E	57	37	E
		PM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	Overflow	Overflow	F	Overflow	Overflow	F
FS-11.	I-405 Between I-110 and Vermont Avenue	AM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	57	38	E	57	38	E
		PM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	Overflow	Overflow	F	Overflow	Overflow	F
FS-12.	I-405 Between Vermont Avenue and Normandie Avenue	AM	NB	56	39	E	56	39	E
			SB	55	41	E	55	41	E
		PM	NB	60	33	D	60	33	D
			SB	Overflow	Overflow	F	Overflow	Overflow	F
FS-13.	I-405 Between Normandie Avenue and Western Avenue	AM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	58	36	E	58	36	E
		PM	NB	53	44	E	53	44	E
			SB	Overflow	Overflow	F	Overflow	Overflow	F

Notes

Overflow: Traffic demand exceeds the available capacity of the freeway mainline segment .

[a] Mean speed measured in miles per hour (mph).

[b] Methodology from *Highway Capacity Manual, 6th Edition, A Guide for Multimodal Mobility Analysis*(Transportation Research Board, 2016).

[c] Measured in vehicles per mile per lane (v/m/l) for freeways with a free-flow speed of 58.2 mph. Free-flow speed, as defined in HCM 6th Edition, is the theoretical speed when the density and flow rate of the freeway mainline segment are both zero.

TABLE 18
LEVEL OF SERVICE DEFINITIONS FOR INTERSECTIONS- HIGHWAY CAPACITY MANUAL

Level of Service	Description	Delay [a]	
		Signalized Intersections	Unsignalized Intersections
A	EXCELLENT. No vehicle waits longer than one red light and no approach phase is fully used.	≤ 10	≤ 10
B	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.	> 10 and ≤ 20	> 10 and ≤ 15
C	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.	> 20 and ≤ 35	> 15 and ≤ 25
D	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.	> 35 and ≤ 55	> 25 and ≤ 35
E	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.	> 55 and ≤ 80	> 35 and ≤ 50
F	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.	> 80	> 50

Notes

Source: *Highway Capacity Manual, 6th Edition, A Guide for Multimodal Mobility Analysis* (Transportation Research Board, 2016).

[a] Measured in seconds.

TABLE 19A
EXISTING WITH PROJECT CONDITIONS (YEAR 2018)
SIGNALIZED INTERSECTION LEVELS OF SERVICE ANALYSIS

No.	Intersection	Peak Hour	Existing Conditions		Existing with Project Conditions	
			Delay	LOS	Delay	LOS
S-1.	Main Street & I-405 NB Off-Ramp (Intersection #2)	A.M. P.M.	11.0 11.5	B B	11.1 12.0	B B
S-2.	Main Street & I-405 SB On-Ramp (Intersection #3)	A.M. P.M.	7.7 13.0	A B	7.8 13.3	A B
S-3.	Avalon Boulevard & SR-91 WB On-Ramp (Intersection #6)	A.M. P.M.	8.7 8.2	A A	8.8 8.2	A A
S-4.	Avalon Boulevard & I-405 NB Ramps (Intersection #15)	A.M. P.M.	15.4 7.7	B A	15.5 7.7	B A
S-5.	Avalon Boulevard & I-405 SB Ramps (Intersection #16)	A.M. P.M.	13.7 7.6	B A	13.7 7.6	B A
S-6.	Main Street & SR-91 WB Ramps (Intersection #17)	A.M. P.M.	13.7 12.9	B B	13.8 13.1	B B
S-7.	I-110 NB On-Ramp & 190th Street (Intersection #21)	A.M. P.M.	6.7 7.5	A A	6.7 7.5	A A
S-8.	I-110 SB Off-Ramp & 190th Street (Intersection #22)	A.M. P.M.	13.1 12.1	B B	13.3 12.3	B B
S-9.	Figueroa Street & I-110 NB Ramps (Intersection #27)	A.M. P.M.	15.8 15.7	B B	15.9 15.9	B B
S-10.	SR-91 EB Ramps & Albertoni Street (Intersection #28)	A.M. P.M.	12.3 11.7	B B	12.4 11.8	B B

Notes

Delay is measured in seconds per vehicle

LOS = Level of service

Results per Vistro 5 (HCM 6th Edition methodology).

TABLE 19B
EXISTING WITH PROJECT CONDITIONS (YEAR 2018)
UNSIGNALIZED INTERSECTION LEVELS OF SERVICE

No.	Intersection	Peak Hour	Existing Conditions		Existing with Project Conditions	
			Delay	LOS	Delay	LOS
U-1. [a]	Hamilton Avenue & I-110 SB Ramps (Intersection #25)	A.M. P.M.	40.0 81.8	E F	40.6 86.7	E F

Notes

Delay is measured in seconds per vehicle

LOS = Level of service

Results per Vistro (HCM 6th Edition methodology).

[a] Intersection is uncontrolled.

TABLE 20A
FUTURE WITH PROJECT CONDITIONS (YEAR 2020)
SIGNALIZED INTERSECTION LEVELS OF SERVICE ANALYSIS

No.	Intersection	Peak Hour	Future without Project Conditions		Future with Project Conditions	
			Delay	LOS	Delay	LOS
S-1.	Main Street & I-405 NB Off-Ramp (Intersection #2)	A.M. P.M.	11.4 13.4	B B	11.6 14.3	B B
S-2.	Main Street & I-405 SB On-Ramp (Intersection #3)	A.M. P.M.	7.9 14.2	A B	8.0 14.6	A B
S-3.	Avalon Boulevard & SR-91 WB On-Ramp (Intersection #6)	A.M. P.M.	9.3 8.8	A A	9.3 8.9	A A
S-4.	Avalon Boulevard & I-405 NB Ramps (Intersection #15)	A.M. P.M.	20.4 9.3	C A	20.6 9.3	C A
S-5.	Avalon Boulevard & I-405 SB Ramps (Intersection #16)	A.M. P.M.	17.8 9.6	B A	17.7 9.7	B A
S-6.	Main Street & SR-91 WB Ramps (Intersection #17)	A.M. P.M.	14.3 13.4	B B	14.4 13.6	B B
S-7.	I-110 NB On-Ramp & 190th Street (Intersection #21)	A.M. P.M.	6.8 7.7	A A	6.8 7.8	A A
S-8.	I-110 SB Off-Ramp & 190th Street (Intersection #22)	A.M. P.M.	14.9 13.3	B B	15.1 13.5	B B
S-9.	Figueroa Street & I-110 NB Ramps (Intersection #27)	A.M. P.M.	17.4 17.3	B B	17.5 17.6	B B
S-10.	SR-91 EB Ramps & Albertoni Street (Intersection #28)	A.M. P.M.	12.6 11.9	B B	12.8 12.0	B B

Notes

Delay is measured in seconds per vehicle

LOS = Level of service

Results per Vistro 5 (HCM 6th Edition methodology).

TABLE 20B
FUTURE WITH PROJECT CONDITIONS (YEAR 2020)
UNSIGNALIZED INTERSECTION LEVELS OF SERVICE ANALYSIS

No.	Intersection	Peak Hour	Future without Project Conditions		Future with Project Conditions	
			Delay	LOS	Delay	LOS
U-1. [a]	Hamilton Avenue & I-110 SB Ramps (Intersection #25)	A.M. P.M.	59.3 131.0	F F	60.2 136.8	F F

Notes

Delay is measured in seconds per vehicle

LOS = Level of service

Results per Vistro (HCM 6th Edition methodology).

[a] Intersection is uncontrolled.

TABLE 21
EXISTING OPERATING CONDITIONS (YEAR 2018)
FREEWAY OFF-RAMP QUEUE ANALYSIS

ID	Freeway Off-Ramp	Ramp and Lane Description	Adjusted Vehicle Storage Capcity [a]	Existing Conditions				Existing with Project Conditions			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
				Vehicle Queue Length [b]	Exceeds Capacity?	Vehicle Queue Length [b]	Exceeds Capacity?	Vehicle Queue Length [b]	Exceeds Capacity?	Vehicle Queue Length [b]	Exceeds Capacity?
Q-1.	I-405 Northbound Off-Ramp to	I-405 Northbound Off-Ramp									
	Main Street	Shared Left/Through	405	94		64		98		66	
	(Intersection #2)	Shared Through/Right	405	79		96		82		106	
		Ramp	400	0	NO	0	NO	0	NO	0	NO
Q-2.	I-405 Northbound Off-Ramp to	I-405 Northbound Off-Ramp									
	Avalon Boulevard	Left	150	9		15		9		15	
	(Intersection #15)	Shared Left/Through	125	9		15		9		15	
		Right (Channelized)	125	0		0		0		0	
		Ramp	455	0	NO	0	NO	0	NO	0	NO
Q-3.	I-405 Southbound Off-Ramp to	I-405 Southbound Off-Ramp									
	Avalon Boulevard	Left	385	35		29		36		30	
	(Intersection #16)	Left	925	35		29		36		30	
		Through	925	1		0		0		0	
		Through	250	1		0		0		0	
		Right (Channelized)	--	0		0		0		0	
		Ramp	885	0	NO	0	NO	0	NO	0	NO
Q-4.	SR 91 Westbound Off-Ramp to	SR 91 Westbound Off-Ramp									
	Main Street	Left	490	134		61		138		65	
	(Intersection #17)	Right	490	118		97		120		100	
		Ramp	1,035	0	NO	0	NO	0	NO	0	NO
Q-5.	I-110 Southbound Off-Ramp to	I-110 Southbound Off-Ramp									
	190th Street	Left	295	34		101		36		110	
	(Interseciton #22)	Right	295	208		189		212		194	
		Ramp	2,235	0	NO	0	NO	0	NO	0	NO
Q-6.	I-110 Southbound Off-Ramp to	I-110 Southbound Off-Ramp									
	Hamilton Avenue	Left	355	324		57		326		57	
	(Interseciton #25)	Shared Left/Right	355	265		50		267		50	
		Ramp	540	0	NO	0	NO	0	NO	0	NO
Q-7.	I-110 Northbound Off-Ramp to	I-110 Northbound Off-Ramp									
	Figueroa Street	Left	300	168		121		170		127	
	(Intersection #27)	Shared Left/Right	355	164		114		166		120	
		Ramp	550	0	NO	0	NO	0	NO	0	NO
Q-8.	SR 91 Eastbound Off-Ramp to	SR 91 Eastbound Off-Ramp									
	Albertoni Street	Left	885	79		197		197		197	
	(Intersection #28)	Right	885	63		197		197		197	
		Ramp	350	0	NO	0	NO	0	NO	0	NO

[a] Storage length capacity is the distance from the freeway mainline gore point to the terminus of the off-ramp, expressed in feet.
[b] 95th Percentile queue results per Vistro 5 (HCM 6th Edition Methodology).

TABLE 22
FUTURE OPERATING CONDITIONS (YEAR 2020)
FREEWAY OFF-RAMP QUEUE ANALYSIS

ID	Freeway Off-Ramp	Ramp and Lane Description	Adjusted Vehicle Storage Capcity [a]	Future without Project Conditions				Future with Project Conditions			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
				Vehicle Queue Length [b]	Exceeds Capacity?	Vehicle Queue Length [b]	Exceeds Capacity?	Vehicle Queue Length [b]	Exceeds Capacity?	Vehicle Queue Length [b]	Exceeds Capacity?
Q-1.	I-405 Northbound Off-Ramp to	I-405 Northbound Off-Ramp									
	Main Street	Shared Left/Through	405	107		90		111		94	
	(Intersection #2)	Shared Through/Right	405	90		125		93		137	
		Ramp	400	0	NO	0	NO	0	NO	0	NO
Q-2.	I-405 Northbound Off-Ramp to	I-405 Northbound Off-Ramp									
	Avalon Boulevard	Left	150	16		43		16		43	
	(Intersection #15)	Shared Left/Through	125	16		43		16		43	
		Right (Channelized)	125	0		0		0		0	
		Ramp	455	0	NO	0	NO	0	NO	0	NO
Q-3.	I-405 Southbound Off-Ramp to	I-405 Southbound Off-Ramp									
	Avalon Boulevard	Left	385	51		58		51		59	
	(Intersection #16)	Left	925	51		58		51		59	
		Through	925	3		0		0		0	
		Through	250	3		0		0		0	
		Right (Channelized)	--	0		0		0		0	
		Ramp	885	0	NO	0	NO	0	NO	0	NO
Q-4.	SR 91 Westbound Off-Ramp to	SR 91 Westbound Off-Ramp									
	Main Street	Left	490	153		73		158		76	
	(Intersection #17)	Right	490	127		108		129		111	
		Ramp	1,035	0	NO	0	NO	0	NO	0	NO
Q-5.	I-110 Southbound Off-Ramp to	I-110 Southbound Off-Ramp									
	190th Street	Left	295	50		153		52		164	
	(Interseciton #22)	Right	295	262		215		267		219	
		Ramp	2,235	0	NO	0	NO	0	NO	0	NO
Q-6.	I-110 Southbound Off-Ramp to	I-110 Southbound Off-Ramp									
	Hamilton Avenue	Left	355	355		123		355		123	
	(Interseciton #25)	Shared Left/Right	355	355		95		355		95	
		Ramp	540	95	NO	0	NO	99	NO	0	NO
Q-7.	I-110 Northbound Off-Ramp to	I-110 Northbound Off-Ramp									
	Figueroa Street	Left	300	198		159		200		165	
	(Intersection #27)	Shared Left/Right	355	196		151		199		158	
		Ramp	550	0	NO	0	NO	0	NO	0	NO
Q-8.	SR 91 Eastbound Off-Ramp to	SR 91 Eastbound Off-Ramp									
	Albertoni Street	Left	885	83		197		197		197	
	(Intersection #28)	Right	885	85		197		197		197	
		Ramp	350	0	NO	0	NO	0	NO	0	NO

[a] Storage length capacity is the distance from the freeway mainline gore point to the terminus of the off-ramp, expressed in feet.
[b] 95th Percentile queue results per Vistro 5 (HCM 6th Edition Methodology).

Chapter 11
Site Access and Internal Circulation

This chapter summarizes the site access and internal circulation of the Project site.

SITE ACCESS

As described in Chapter 1, primary site access is provided by new driveways located on Martin Luther King, Jr. Street and on Avalon Boulevard at Elsmere Drive; secondary access is provided by another new driveway on Avalon Boulevard, south of Martin Luther King, Jr. Street.

Primary Access

Both the Martin Luther King, Jr. Street and Avalon Boulevard at Elsmere Drive driveways will provide primary site access at all times at full build-out.

The Martin Luther King, Jr. Street driveway will be effectively located at the northwestern corner of the Project site. The driveway will provide two inbound lanes with two outbound lanes configured as separate left-turn and right-turn lanes. Improvements to Martin Luther King, Jr. Street will include the installation of a new traffic signal, along with an eastbound right-turn lane and westbound left-turn lane. Full access to the Project site will be available through this driveway, along with the parking and loading/unloading activities associated with those uses.

The Avalon Boulevard at Elsmere Drive driveway will form the new west leg of the existing signalized intersection at Avalon Boulevard & Elsmere Drive. The driveway will provide two inbound lanes with two outbound lanes configured as separate left-turn and right-turn lanes; eastbound through traffic to Elsmere Drive will be restricted. Improvements to Avalon Boulevard, as part of the new driveway, include the installation of a second northbound left-turn

lane. At full build-out, full access to the Soccer Center will be available through this driveway, along with the associated parking and loading/unloading activities.

Secondary Access

A new driveway on Avalon Boulevard, south of Martin Luther King, Jr. Street will provide secondary access to the Project site with one inbound and one outbound lane controlled by a stop sign; this driveway is limited to right-turn in and out access only. As a secondary access point, the driveway will be restricted to employee use only during typical daily operations.

Event Access

Access to the Project site on days with special events will be guided by the SEMP. In general, both the primary driveways and secondary driveway will be open to all users during events.

INTERNAL CIRCULATION

Within the Project site, internal circulation is limited to the respective sides of the Learning Center, Tennis Center and Soccer Center. The Martin Luther King, Jr. Street driveway provides a drive aisle into the site with direct access to the Learning Center and Tennis Center. In addition, this drive aisle provides shared access into the northern portion of The Creek. To accommodate this functionality with The Creek, it is anticipated that the drive aisle will be comprised of a four-lane cross section through the Project site (generally between The Creek and the Martin Luther King, Jr. Street driveway). The drive aisle may be equipped to operate with reversible lanes, per the SEMP or when determined operationally necessary (i.e., unanticipated high traffic volumes on-site or from The Creek).

Along Avalon Boulevard, the two daily use parking lots and the two overflow parking lots will be designed to allow internal linkages (i.e., continuous drive aisles) that may be closed during daily operations and opened by the SEMP.

BICYCLE AND PEDESTRIAN ACCESS

It is anticipated that bicycle/pedestrian access gates will be provided along the public sidewalks into the Project site located near the activity centers. Bicycle parking is also anticipated to be located either near the access gates or the Project's activity centers.

In addition, access points between the Project and The Creek are anticipated along the shared portions of the perimeter fencing. These specific locations have not been finalized but are anticipated to be strategically located near the key activity centers between the two sites.

Chapter 12
Parking Analysis

This chapter provides an analysis of the off-street parking requirements in relation to the Project's proposed parking supply.

As described in Chapter 1, the total Project parking supply consists of 1,547 spaces located in on-site surface parking lots across the Project site. The parking supply is comprised of 692 marked spaces in three parking lots with another 855 spaces designated for overflow use, when necessary[8].

OFF-STREET PARKING RATES

The off-street parking requirements of the Project were identified using the applicable parking rates established in Part 11, Chapter 22.52 of the Los Angeles County Zoning Ordinance (Zoning Ordinance). Other sources were utilized to develop the parking requirement for land uses not specifically identified in the Zoning Ordinance.

The parking rate for the Tennis Center is identified in Chapter 22.52.1177 of the Zoning Ordinance as two spaces per tennis court.

The parking rates for the Player Development Facility, Learning Center, and Administrative Office were derived from Chapter 22.52.1175 A 1 (c) for Public Parks[9], which requires one space per 400 square feet. This parking rate was conservatively applied to the Player Development Center and Learning Center, based on the anticipated operation of each use.

[8] Approximately 290 of the designated overflow spaces are located within the footprint of the proposed tennis exhibition court. When the tennis exhibition court is constructed, the removal of the 290 overflow spaces will result in a reduced parking supply of 1,257 spaces.

[9] Public parks less than 50 acres with other public buildings not including certain uses for which specific parking rates are provided per Chapter 22.52.1175 A 1(c).

The parking requirements of the Soccer Center were separated into weekday and weekend conditions, which respectively represent non-tournament and tournament operation. The respective parking requirements were derived from two sources: *Parking Generation, 4th Edition* (Institute of Transportation Engineers, 2010) and *Trip Generation, Parking, and Gate Control Strategies for the Placer Valley Sports Complex.*

- The weekday parking requirements were derived from *Parking Generation, 4th Edition* Land Use Code 488 – Soccer Center, which consists of non-professional soccer activities to accommodate different age groups and assumed as a non-tournament condition. This use is consistent with the described daily operation of the Project's Soccer Center. The parking rate of 38.3 spaces per field is used for typical weekday conditions.

- The weekend parking requirements were utilized from *Trip Generation, Parking, and Gate Control Strategies for the Placer Valley Sports Complex*, which developed a parking rate for weekend tournament conditions based on empirical parking demand data. The operating conditions of the Placer Valley Sports Complex are consistent with the described tournament operation of the Project's Soccer Center. The parking rate of 82 spaces per field is used for weekend tournament conditions.

The parking rate of the other recreational amenities was based on the parking requirements developed in *Center Avenue Skatepark Traffic Analysis*. A parking rate of 0.53 spaces per 1,000 sf was calculated from the reference material; this parking rate incorporates ancillary uses such as restrooms and support buildings.

PROJECT PARKING REQUIREMENTS

The parking rates described above were applied to the Project component, as follows:

- Tennis Center (62 courts): 124 spaces
- Player Development Facility (13,000 sf): 33 spaces
- Learning Center (25,000 sf): 63 spaces
- Administrative Office (5,000 sf): 13 spaces

- Soccer Center (10 fields): 383 spaces, weekday
820 spaces, weekend
- Other Recreational Amenities / Skatepark (43,560 sf): 23 spaces

The total weekday parking requirement is 639 spaces, with a total weekend parking requirement of 1,076 spaces.

PARKING ANALYSIS

As previously described, the total 1,547 space parking supply is comprised of 692 marked spaces in three surface parking lots that are available at all times and 855 spaces available for overflow use on weekends or when necessary.

The 639 spaces required for weekday use can be fully accommodated by the 692 marked spaces, with a surplus of approximately 53 spaces without the use of the overflow spaces.

The 1,076 spaces required for weekend use can be fully accommodated by the total 1,547 space parking supply, with a surplus of approximately 471 spaces with the use of the overflow parking.

Therefore, the Project parking supply is anticipated to adequately meet the parking requirements of the proposed uses on-site[10]. Table 23 summarizes the parking analysis findings.

[10] When the proposed tennis exhibition court is constructed, approximately 290 overflow parking spaces will be removed, reducing the overall supply to 1,257 spaces. However, the parking requirements will continue to be satisfied by the adjusted Project parking supply.

TABLE 23
OFF-STREET PARKING REQUIREMENTS

Parking Requirement	Parking Rates [a]		Unit		Required Parking
Proposed Uses					
Soccer Center - weekday [b]	38.3	per field	10	fields	383
Soccer Center - weekend [c]	82.0	per field			820
Skatepark [d]	0.53	per 1,000 sf	43,560	sf	23
Tennis Center [e]	2.00	per court	62	courts	124
Player Development Center [f]	1.0	per 400 sf	13,000	sf	33
Learning Center [f]	1.0	per 400 sf	25,000	sf	63
Administrative Office [f]	1.0	per 400 sf	5,000	sf	13
				Weekday Parking Requirement	639
				Weekend Parking Requirement	1,076
Total On-site Parking Supply [g]					**1,547**
Weekday parking (deficit)/surplus					908
Weekend parking (deficit)/surplus [h]					471

Notes:

Off-street parking requirements from Los Angeles County Zoning Ordinance or other source, as noted.

[b] Rate from *Parking Generation, 4th Edition* (ITE, 2010) for Land Use Code 488 - Soccer Center. The parking rate is demand based and representative of typical weekday (non-tournament) condition.

[c] Rate from *Placer Valley Sports Complex* (GTC, 2015). The parking rate was empirically derived and represents a weekend tournament condition.

[d] Rate from *Center Avenue Skatepark Traffic Analysis* (Austin-Foust Associates, 2011). The parking rate was empirically derived and includes ancillary uses that are not proposed with the CKSAC skatepark.

[e] LA County Zoning Ordinance 22.52.1177 - Tennis Courts

[f] LA County Zoning Ordinance 22.52.1175 A 1(c) - Public parks less than 50 acres with other public buildings not including certain uses for which specific parking rates are provided.

[g] The total on-site parking supply of 1,547 spaces includes 692 spaces in marked parking stalls with 855 spaces available for use as overflow, when necessary.

[h] Weekend parking surplus is based on a tournament condition at the Soccer Center and does not assume a simultaneous event/tournament at the Tennis Center.

Chapter 13
Summary and Conclusions

This study was undertaken to analyze the potential traffic impacts of the Project on the local street system. The following summarizes the results of this analysis:

- As the Project site is a County-owned property, the scope of analysis for this study was developed in consultation with the County.
- The Project, located on 87 acres at 340 Martin Luther King, Jr. Street, is proposed to include at full build-out:
    - The Learning Center, to be operated by the Tiger Woods Foundation, on approximately one acre with an up to 25,000 sf building
    - The Tennis Center, to be operated by the USTAF, located on approximately 28 acres with new buildings including approximately 41,000 sf for a Welcome Center, player development activities and administrative offices and up to 62 tennis courts of varying sizes and an exhibition court along with seating areas for up to 1,200 spectators
    - The Soccer Center, located on approximately 58 acres with 10 sports fields for soccer and other sporting uses, along with up to 10,000 sf of support building(s)
    - Additional recreational areas for community use
    - A total of 1,547 parking spaces in a combination of 692 regularly marked spaces in three surface parking lots and 855 unmarked spaces in overflow parking lots. When the proposed tennis exhibition court is constructed, approximately 290 overflow parking spaces will be removed, reducing the overall supply to 1,257 spaces.
- Primary site access will be provided by new driveways on Martin Luther King, Jr. Street and on Elsmere Drive at Avalon Boulevard, along with a new limited access driveway on Avalon Boulevard.
- The Project is proposed to be completed in 2020.
- A total of 31 intersections were selected for analysis with input from the County, Caltrans, and the City of Carson. Analysis scenarios, as required by the County, included:
    - Existing Conditions (Year 2018)
    - Existing with Project Conditions (Year 2018)

- Future with Project conditions (Year 2020)

- The weekday analysis, representative of typical operating conditions, was conducted for the morning and afternoon peak periods. The Saturday analysis, representative of regular tournament operations, was conducted for the mid-day period in a focused 17-intersection study area. The underlying assumptions of the analysis conditions are consistent with County requirements.

- The Existing with Project conditions analysis indicates that three signalized intersections would be significantly impacted with the addition of Project traffic before mitigation during weekday conditions. No Saturday impacts were identified. An additional unsignalized intersection was significantly impacted based on meeting signal warrant criteria under the weekday condition. Mitigation measures were developed to reduce the Project impacts to a less than significant level. These intersections and their mitigations, discussed in more detail in this report, include:

    7. Avalon Boulevard & Albertoni Street: add second northbound left-turn lane

    18. Main Street & Albertoni Street: add eastbound right-turn lane

    19. Main Street & Victoria Street: add eastbound right-turn lane

    25. Hamilton Avenue & I-110 Southbound Ramps: reconfigure southbound approach left-turn and shared left-turn/through lane and install new signal

- The Future with Project Conditions analysis projects a total of 14 intersections to be significantly impacted by the addition of Project traffic and cumulative growth (13 during weekday conditions and three during Saturday conditions, of which two were previously identified in the weekday conditions). Mitigation measures were identified to reduce the significant impacts, where feasible. These intersections and their mitigations, discussed in more detail in this report, include:

    1. Main Street & Martin Luther King, Jr Street: reconfigure westbound approach lanes and add northbound right-turn lane

    3. Main Street & I-405 Southbound Off-ramp: reconfigure eastbound approach lanes

    4. Main Street & Del Amo Boulevard: add northbound right-turn lane and westbound left-turn lane, modify signal phasing

    7. Avalon Boulevard & Albertoni Street: same as Project mitigation above

    8. Avalon Boulevard & Victoria Street: reconfigure eastbound approach lanes

    10. Avalon Boulevard & University Drive: reconfigure westbound approach lanes

    14. Avalon Boulevard & Del Amo Boulevard: modify northbound median to add second northbound left-turn lane, reconfigure southbound and eastbound approach lanes

16. Avalon Boulevard & I-405 Southbound ramps: modify signal phasing and upgrade equipment

18. Main Street & Albertoni Street: same as Project mitigation above

19. Main Street & Victoria Street: same as Project mitigation above

22. I-110 Southbound ramp & 190th Street: reconfigure eastbound approach lanes

24. Hamilton Avenue & Del Amo Boulevard: reconfigure northbound approach lanes and modify signal phasing

25. Hamilton Avenue & I-110 Southbound Ramps: same as Project mitigation above

26. Figueroa Street & Del Amo Boulevard: reconfigure westbound approach and modify signal phasing

- Of the 14 intersections identified above, nine are mitigated to less than significant levels. The following five intersections would remain residually impacted (four during weekday conditions and two during Saturday conditions, of which one is already identified during the weekday):

    4. Main Street & Del Amo Boulevard – weekday afternoon

    14. Avalon Boulevard & Del Amo Boulevard – weekday morning and Saturday mid-day

    16. Avalon Boulevard & I-405 Southbound ramps – Saturday mid-day

    18. Main Street & Albertoni Street – weekday afternoon

    19. Main Street & Victoria Street – weekday afternoon

- Many of the intersections and mitigation measures require the review and approval of other jurisdictions such as Caltrans, the City of Carson and City of Los Angeles.

- Supplemental analyses using the Caltrans and City of Carson methodologies were conducted for informational purposes and respectively, did not identify any additional potentially impacted locations beyond those already identified through the County analysis.

- Special events may be held occasionally at the Project site. A Special Event Management Plan will guide on-site traffic operation; specific measures from the Special Event Management Plan will be implemented on a tiered approach and based on certain usage thresholds.

- The proposed parking supply meets County zoning requirements on weekdays and during typical operations without the use of overflow parking and on weekends and during tournament operations with the use of the on-site overflow parking.

References

2004 Congestion Management Program for Los Angeles County, Los Angeles County Metropolitan Transportation Authority, July 2004.

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2010 Congestion Management Program for Los Angeles County, Los Angeles County Metropolitan Transportation Authority, 2010.

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California Manual on Uniform Traffic Control Devices, California Department of Transportation, 2012.

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Carson Master Plan of Bikeways, City of Carson, 2013.

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Mobility Plan 2035, An Element of the General Plan, Los Angeles Department of City Planning, January 2016.

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State of California Senate Bill No. 743, Steinberg, 2013.

References, cont.

Trip Generation, 9th Edition, Institute of Transportation Engineers, 2012.

Trip Generation, 10th Edition, Institute of Transportation Engineers, 2017.

Trip Generation, Parking, and Gate Control Strategies for the Placer Valley Sports Complex, Roseville, California, Gibson Transportation Consulting, Inc., November 25, 2015.

Vision Zero: Eliminating Traffic Deaths in Los Angeles by 2025, City of Los Angeles, August 2015.

Appendix A

Memorandum of Understanding

SCOPING FOR TRAFFIC STUDY

Project Name:	The Carol Kimmelman Sports and Academic Campus

This Memorandum of Understanding (MOU) acknowledges Los Angeles County Department of Public Works, Traffic and Lighting Division (TLD) requirements of traffic impact analysis for the project and is subject to change:

Project Address:	340 E. MLK Jr Street, Carson, CA 90746		
Project Description:	The proposed project would develop a sports and academic campus on approximately 87 acres of the existing Victoria Golf Course site, including an up to 23,000 sq ft welcome center, 25,000 sq ft. learning center, 13, 000 sq ft. player development building, 62 tennis courts of varying sizes, an exhibition court and spectator areas, 10 soccer/multi-purpose fields, 5,000 sq ft administration building, and other recreational amenities.		
City:	Carson		
Project Build-out Year:	2020	**Notice of Preparation/Start of Env. Analysis:**	
Closest Intersection (Xtn) to the Project			
Xtn N/S Street Name:	Avalon Boulevard		
Xtn E/W Street Name:	Elsmere Drive		
Thomas Guide Pg+Grid:	Refer to Figure 1	**Los Angeles County Supervisorial District:**	2

	Consultant	**Developer**
Company:	Gibson Transportation and Consulting, Inc.	
Name:	Eugene Tang	
Address:	555 W. 5th Street	
City, State, Zip Code:	Los Angeles, CA, 90013	
Phone #:	213-683-0088	
Fax #:		
Email:	etang@gibsontrans.com	

By:	**Reviewed By:** Sean Ryan
Print Name: Eugene Tang	**Print Name:** Sean Ryan, PE
Phone: 213-683-0088	**Phone:** 626-300-4851
Email: etang@gibsontrans.com **2/14/19**	**Email:** sryan@dpw.lacounty.gov 3/5/2019

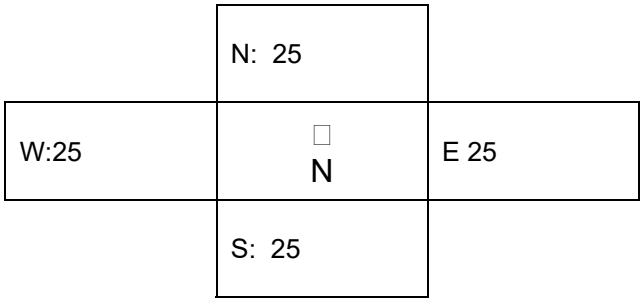
For General Questions, please contact Traffic Studies Section at (626) 300-4740

SCOPING FOR TRAFFIC STUDY

Project Name:	The Carol Kimmelman Sports and Academic Campus

Consultant/Developer's Representative	**Date**	**TLD's Representative**	**Date**

1. Traffic Distribution: Figure(s) illustrating project trip distribution in percentages and volumes at the studied intersections analyzed. **[Shown in Figures 2&3]**



Trip Credit/Reduction: Exact amount of credit subject to approval by TLD.

Existing Active Land Use Credit	Yes	
Previous Land Use Credit	No	
Internal Trip Reduction	No	
Retail Pass-by Trip Reduction (10%)	No	

SCOPING FOR TRAFFIC STUDY

Project Name:	The Carol Kimmelman Sports and Academic Campus

2. Trip Generation

Trip Generation Rate(s) Source: ITE Trip Generation	**I – Institute of Transportation Engineers; S – San Diego Traffic Generators; C – County; O – Other:**		

	Land Use Description (Code)	**Trip Generation Source**	***AVTE vs.**	**Quantity**	**Daily Trips Generated**	**Weekday a.m. peak**		**Weekday p.m. peak**		**Weekend peak hour**	
						In	**Out**	**In**	**Out**	**In**	**Out**
	Please see Table 1 for Trip Generation										

* - Average Vehicle Trip Ends.

SCOPING FOR TRAFFIC STUDY

Project Name:	The Carol Kimmelman Sports and Academic Campus

3. Study Intersections: At minimum, the study shall include the following intersections. The list is subject to change after related projects, trip generation and distribution are determined. Consultant should check with adjoining Cities regarding their requirements in addition to the following County/City intersections. Documentation of the consultation from these agencies shall be included in the traffic study.

Xtn #	Jurisdictional Split	Thomas Guide Page+Grid	N/S and E/W Street Names	Signalized	CMP
1			Please see Table 2 for Study Intersections		
2					
3					
4					
5					
6					
7					
8					
9					
10					

Agencies to be contacted: City of Los Angeles, City of Carson, Caltrans

For General Questions, please contact Traffic Studies Section at (626) 300-4740

4. Related Projects: Project Consultant shall consultant with Los Angeles County Department of Regional Planning and planning departments of adjoining Cities to identify planned development in the vicinity of the project site. **[Provided in Table 3]**

5. Congested Management Program (CMP): Project Consultant shall conduct CMP analysis in accordance with the County's Traffic Impact Analysis Report Guidelines.

6. Freeway Analysis: Project Consultant shall consult with the State of California Department of Transportation (Caltrans) to determine the California Environmental Quality Act levels of significance with regard to traffic impacts on Caltrans' freeway facilities. This consultation shall also include a determination of Caltrans requirements for the study of traffic impacts to its facilities and the mitigation of any such impacts. This analysis must follow the most current Caltrans' Guide for the Preparation of Traffic Impact Studies (December 2002). If Caltrans finds that the project has a significant impact on the freeway, Caltrans shall be requested to include the basis for this finding in their response. If fees are proposed to mitigate the freeway impact, Caltrans shall be requested to identify the specific project to which the fees will apply. These written comments from Caltrans shall be included with the traffic study and submitted to Public Works for review and approval. If a documented good faith effort is made to consult with Caltrans and written comments cannot be obtained from within a reasonable amount of time, an analysis of the freeway impact shall be made using the County of Los Angeles' CMP Land Use Analysis Guidelines.

7. Site Access Analysis: Project's in rural areas shall conduct a site access analysis in accordance with the County's Access Management for Private Developments Guidelines Manual. All schools, waste/recycling collection or other projects as determined by TLD shall conduct a queuing analysis to ensure queues do not spill-over onto County roads. For schools, provide boundary map and information on neighboring schools including day care facilities. The traffic study will also document pick-up and drop-off procedures. **[Site Plan provided in Figure 4]**

8. Other Instructions:

Traffic counts may be conducted immediately per the following:
• Must be taken on Tuesdays, Wednesdays or Thursdays.
• Must exclude holidays, and the first weekdays before and after the holiday.
• Must be taken on days when local schools or colleges are in session.
• Must be taken on days of good weather, and avoid atypical conditions (e.g., road construction, detours, or major traffic incidents).
• Traffic counts used for other traffic studies in the area shall **NOT** be reused again, unless 25% of the counts conducted for that particular traffic study are validated with new counts. The difference in volumes between the old and new counts at each corresponding movement should not be more than 10%.
• New traffic counts shall be checked to ensure the difference in volumes at corresponding approaches, if applicable, between two adjacent intersections is no more than 10% unless the difference can be justified.

For all proposed mitigation measures to address project specific impacts, the project shall include conceptual plans for the improvements in the traffic study which shall be made part of the review and approval of the traffic study. All proposed improvements shall be within public the right-of-way.

For all proposed mitigation measures to address cumulative impacts, the project shall include conceptual plans and cost estimates for the improvements in the traffic study which shall be made part of the review and approval of the traffic study.
Unless otherwise approved by TLD, level-of-service analysis shall be performed based on the following scenarios: (a) Traffic conditions in the vicinity of the project as they exist at the time the notice of preparation (NOP) is published, or if no NOP is published, at the time environmental analysis is commenced; (b) Traffic in (a) plus project traffic; (c) Traffic in (b) with the proposed mitigation measures (if necessary); (d) Traffic in (b) plus the cumulative traffic that includes project and other known developments at the time the notice of preparation (NOP) is published, or if no NOP is published, at the time environmental analysis is commenced; and (e) Traffic in (d) with the proposed mitigation measures (if necessary).
Any required Traffic Index calculations shall be prepared in accordance with the latest version of the Caltrans Highway Design Manual
A Special Event Management Plan (SEMP) will be prepared for special events programed as part of the Project
The City of Carson applies intersection capacity utilization (ICU) methodology at signalized intersections while the City of Los Angeles required the critical movement analysis (CMA) worksheets for analysis of intersections. Signal warrant analyses are performed for analysis of unsignalized intersections in the City of Los Angeles and the County. In the City of Carson, if the worst approach is LOS E or F, then the significance of the Project impact is determined based on the ICU volume to capacity addition.

Contact Caltrans to determine if a freeway segment screening analysis is required.

TABLE 1
PROJECT TRIP GENERATION ESTIMATES

TRIP GENERATION RATES [a]													
Land Use	ITE Land Use	Rate	Weekday							Weekend			
			Daily	A.M. Peak Hour			P.M. Peak Hour			Daily	Complex Peak Hour		
				In	Out	Total	In	Out	Total		In	Out	Total
Golf Course [b]	430	per acre	3.74	74%	26%	0.19	34%	66%	0.28	5.82	52%	48%	0.64
General Office Building [c]	710	per ksf	9.74	86%	14%	1.16	16%	84%	1.15	2.21	54%	46%	0.53
Soccer Complex [d]	488	per field	71.33	61%	39%	0.99	66%	34%	16.43	430	59%	41%	54
Recreational Community Center [e]	495	per ksf	28.82	66%	34%	1.76	47%	53%	2.31	9.1	54%	46%	1.07
Tennis Courts [f]	490	per court	30.32	50%	50%	1.67	50%	50%	3.67	27.83	50%	50%	3
Skatepark	[g]	per ksf	9.1	53%	47%	0.3	50%	50%	1.36	16.61	53%	47%	1.86

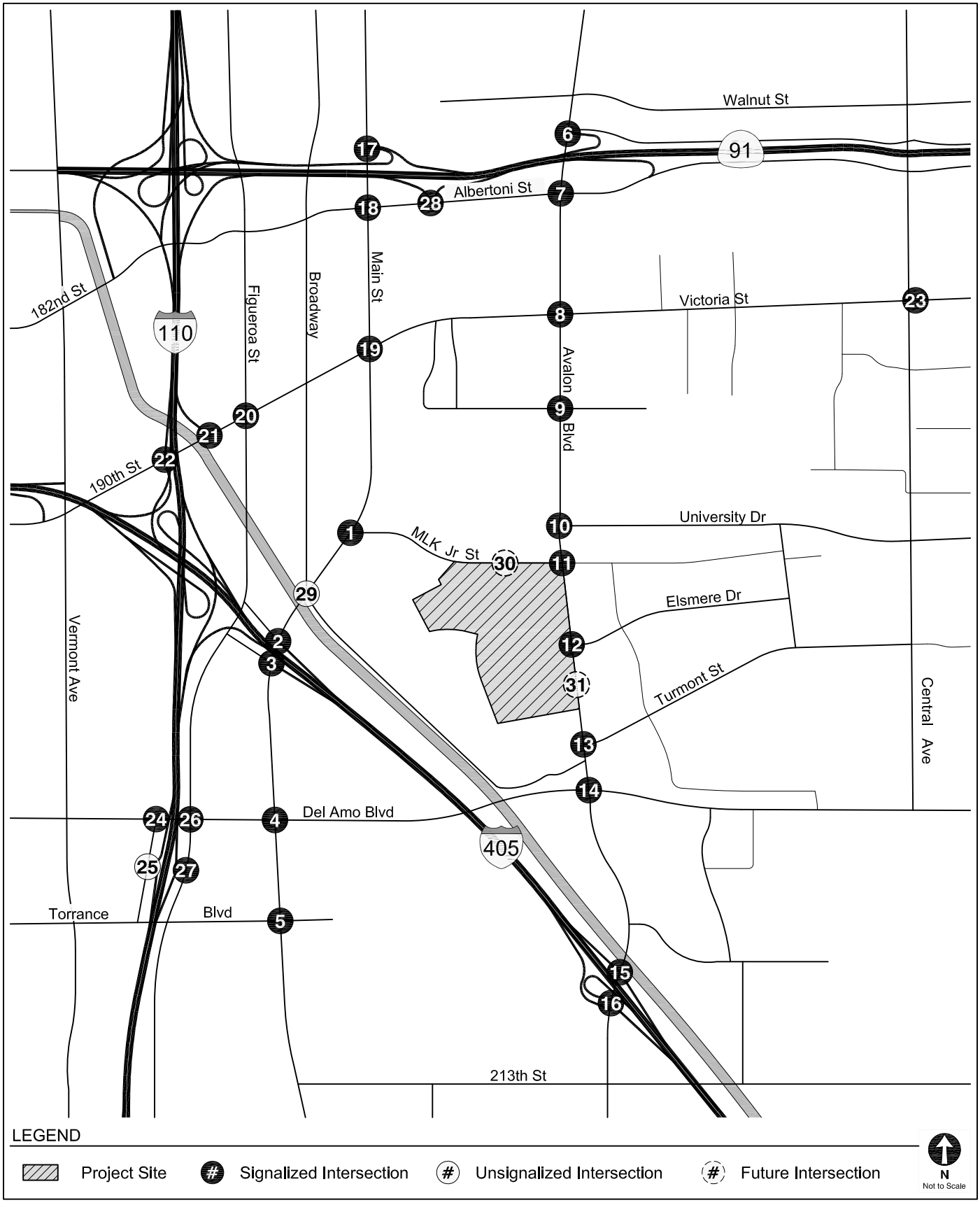
TRIP GENERATION ESTIMATES												
Land Use	Size	Weekday							Weekend			
		Daily	A.M. Peak Hour			P.M. Peak Hour			Daily	Complex Peak Hour		
			In	Out	Total	In	Out	Total		In	Out	Total
Existing Uses												
Victoria Golf Course	87 Acres	325	12	5	17	8	16	24	506	29	27	56
Subtotal - Existing Uses		***325***	***12***	***5***	***17***	***8***	***16***	***24***	***506***	***29***	***27***	***56***
Proposed Project												
Soccer Complex - ITE Rates / Emprirical	10 fields	713	6	4	10	108	56	164	4,300	319	221	540
Skatepark	43,560 sf	396	7	6	13	30	29	59	724	43	38	81
Tennis Complex [h]	62 courts	1,880	55	54	109	72	71	143	1,725	93	93	186
League Administration Building	5,000 sf	49	5	1	6	1	5	6	11	1	2	3
Learning Center/Development Facility	38,000 sf	1,095	44	23	67	41	47	88	346	22	19	41
Subtotal - Proposed Project		**4,133**	**117**	**88**	**205**	**252**	**208**	**460**	**7,106**	**478**	**373**	**851**
TOTAL NET NEW PROJECT TRIPS		**3,808**	**105**	**83**	**188**	**244**	**192**	**436**	**6,600**	**449**	**346**	**795**

Notes:
[a] Trip generation rates, unless otherwise noted, are from *Trip Generation, 10th Edition* , Institute of Transportation Engineers, 2017.
[b] Weekend trip generation rates for golf course use *Trip Generation, 9th Edition,* Institute of Transportation Engineers, 2012.
[c] League administration building trips based on ITE Land Use 710 (General Office Building).
[d] Weekday trip generation rates for Land Use 488: Soccer Complex from *Trip Generation, 10th Edition* , Institute of Transportation Engineers, 2017. Weekend trip generation rates based on emperical data taken at Placer Valley Sports Complex, 2015.
[e] To be conservative, the learning center and development facility trips were based on ITE Land Use 495 (Recreational Community Center). It is anticipated that this use would operate based on a fixed number of daily sessions with students primarily transported by bus, with no pick-up/drop-off occuring at the center.
[f] Trip generation Rates based on *Trip Generation, 9th Edition* , Institute of Transportation Engineers, 2012. Assumes Weekday AM and PM peak hours have 50% directional distribution.
[g] Trip generation rates from Center Avenue Skatepark found in the City of Huntington Beach Center Avenue Skatepark TIA, published December 2011. Weekend Daily trips were determined based on the ratio of weekday afternoon peak hour trips to weekday daily trips.
[h] Includes Exhabition Court, Spectator Venue, and Tennis Center Courts.

TABLE 2
STUDY INTERSECTIONS

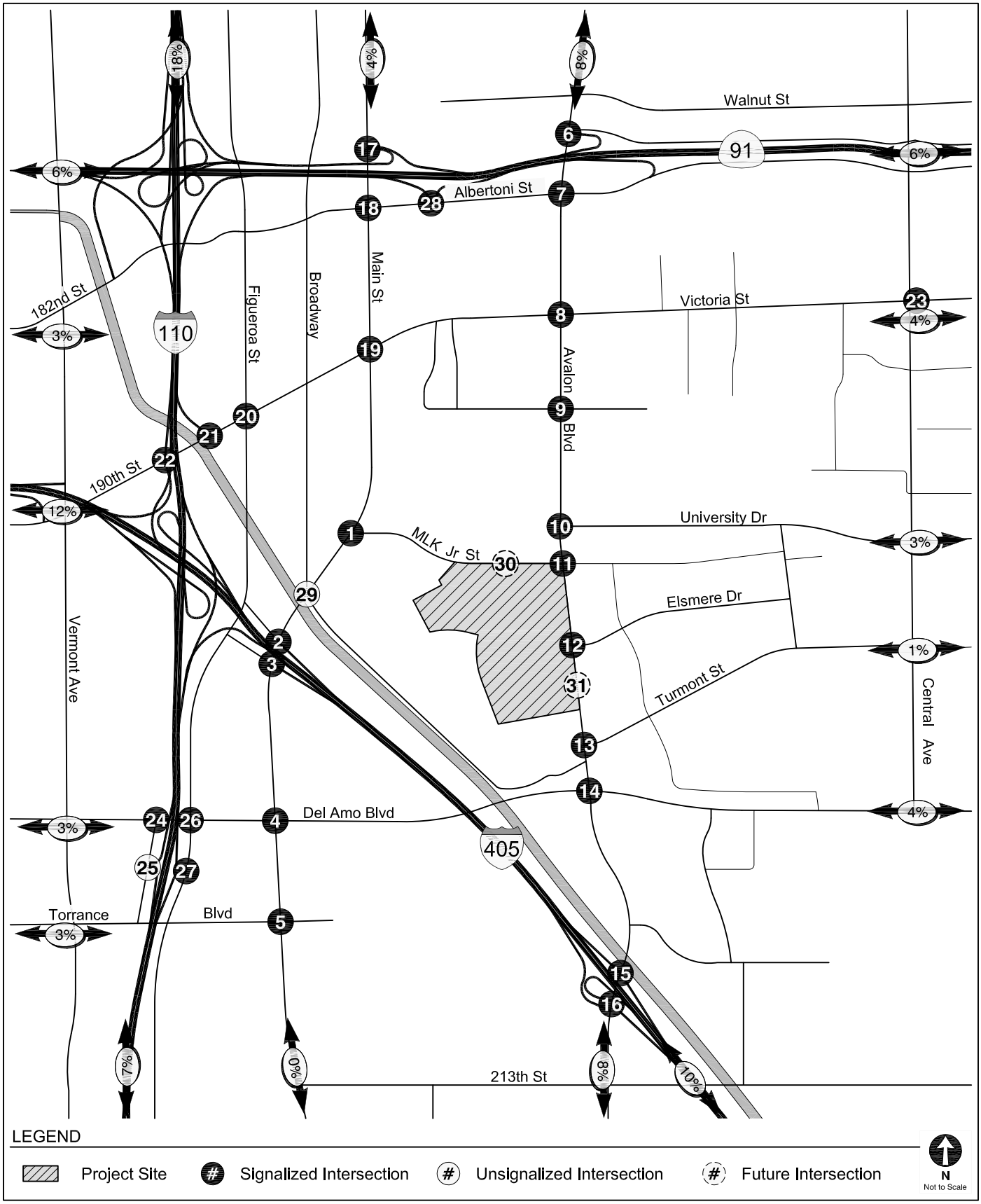
No.	N/S Street	E/W Street	Jurisdiction
1.	Main Street	MLK Jr Street	City of Carson
2.	Main Street	I-405 NB Off-Ramp	City of Carson/Caltrans
3.	Main Street	I-405 SB On-Ramp	City of Carson/Caltrans
4.	Main Street	Del Amo Boulevard	City of Carson
5.	Main Street	Torrance Boulevard	City of Carson
6.	Avalon Boulevard	Artesia Bl/SR-91 WB On-Ramp	City of Carson/Caltrans
7.	Avalon Boulevard	Albertoni Street	City of Carson
8.	Avalon Boulevard	Victoria Street	City of Carson
9.	Avalon Boulevard	184th Street-StubHub Center Gate	City of Carson
10.	Avalon Boulevard	University Drive	City of Carson
11.	Avalon Boulevard	MLK Jr Street	City of Carson
12.	Avalon Boulevard	Elsmere Drive	City of Carson
13.	Avalon Boulevard	Turmont Street	City of Carson
14.	Avalon Boulevard	Del Amo Boulevard	City of Carson
15.	Avalon Boulevard	I-405 NB Ramps	City of Carson/Caltrans
16.	Avalon Boulevard	I-405 SB Ramps	City of Carson/Caltrans
17.	Main Street	SR-91 WB Ramps	City of Carson/Caltrans
18.	Main Street	Albertoni Street	City of Carson
19.	Main Street	Victoria Street	City of Carson
20.	Figueroa Street	Victoria Street	City of Carson/City of Los Angeles
21.	I-110 NB On-Ramp	190th Street	City of Los Angeles/Caltrans
22.	I-110 SB Off-Ramp	190st Street	City of Los Angeles/Caltrans
23.	Central Avenue	Victoria Street	City of Carson
24.	Hamilton Avenue	Del Amo Boulevard	County of Los Angeles
25 [a].	Hamilton Avenue	110 SB Ramps	County of Los Angeles/Caltrans
26.	Figueroa Street	Del Amo Boulevard	City of Carson
27.	Figueroa Street	110 NB Ramps	City of Carson/Caltrans
28.	SR-91 EB Ramps	Albertoni Street	City of Carson/Caltrans
29 [a].	Main Street	Broadway	City of Carson
30.	New Intersection	MLK Jr Street	City of Carson
31.	Avalon Boulevard	New Intersection	City of Carson

Notes:
[a] Unsignalized intersection

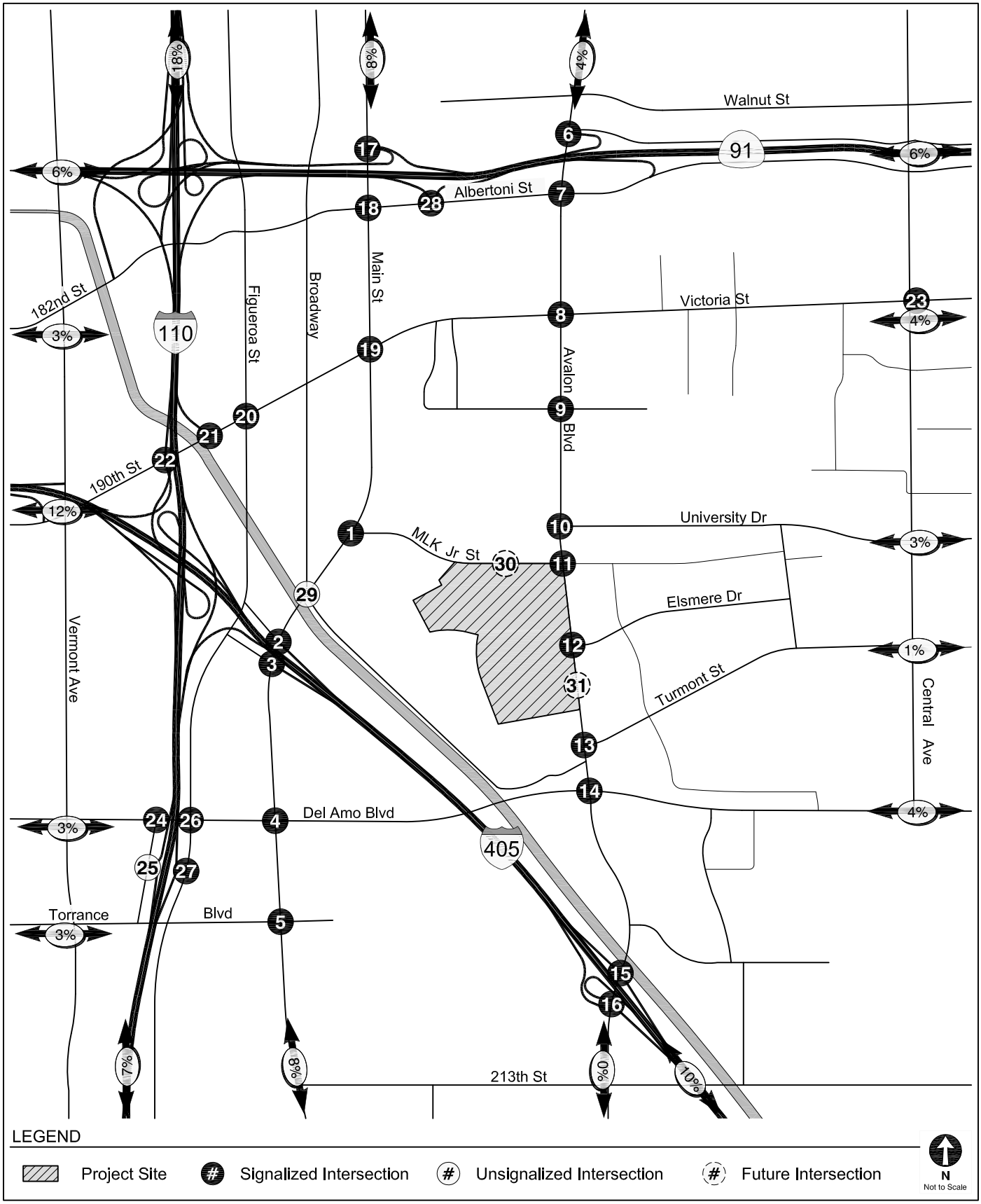


STUDY AREA

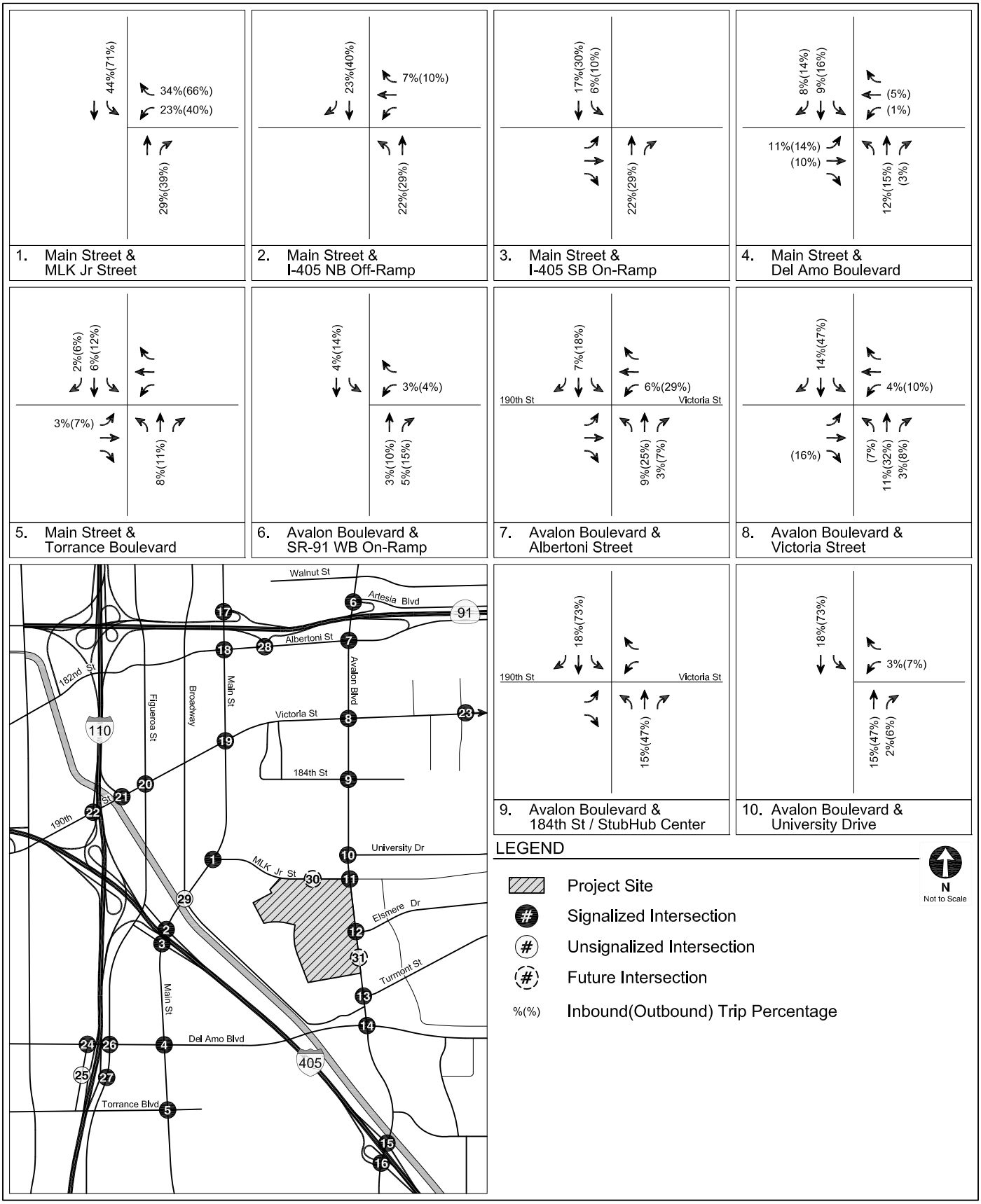
FIGURE 1



REGIONAL TRIP DISTRIBUTION WEEKDAY SOCCER	FIGURE 2A

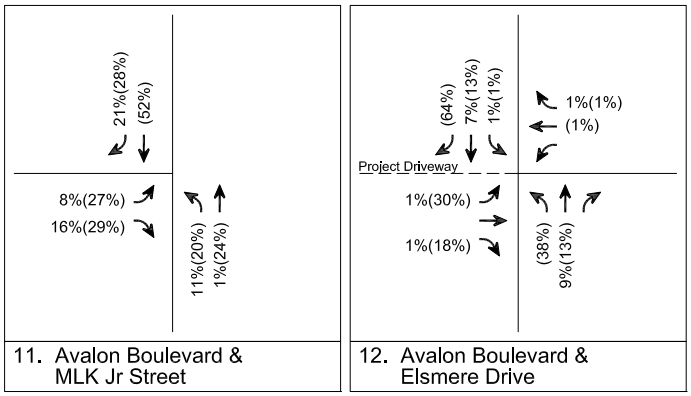


REGIONAL TRIP DISTRIBUTION WEEKDAY TENNIS / CENTER	FIGURE 2B



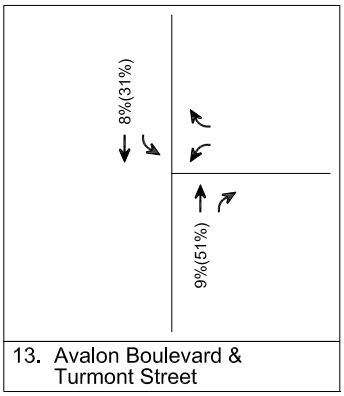
PROJECT TRIP DISTRIBUTION
WEEKDAY

FIGURE
3

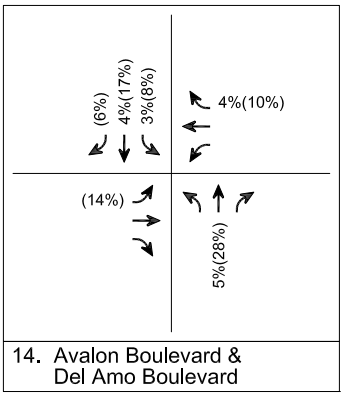


11. Avalon Boulevard & MLK Jr Street

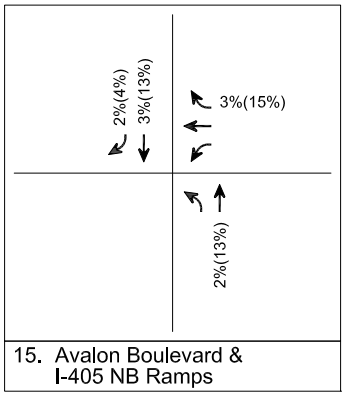
12. Avalon Boulevard & Elsmere Drive



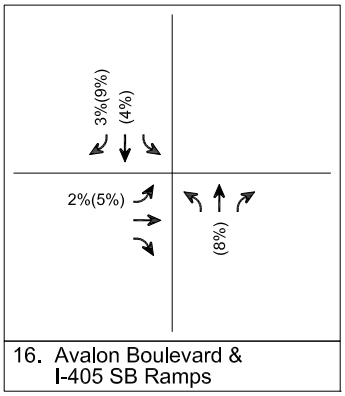
13. Avalon Boulevard & Turmont Street



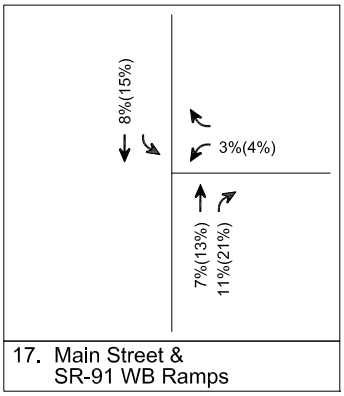
14. Avalon Boulevard & Del Amo Boulevard



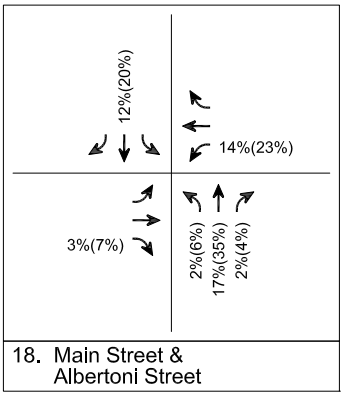
15. Avalon Boulevard & I-405 NB Ramps



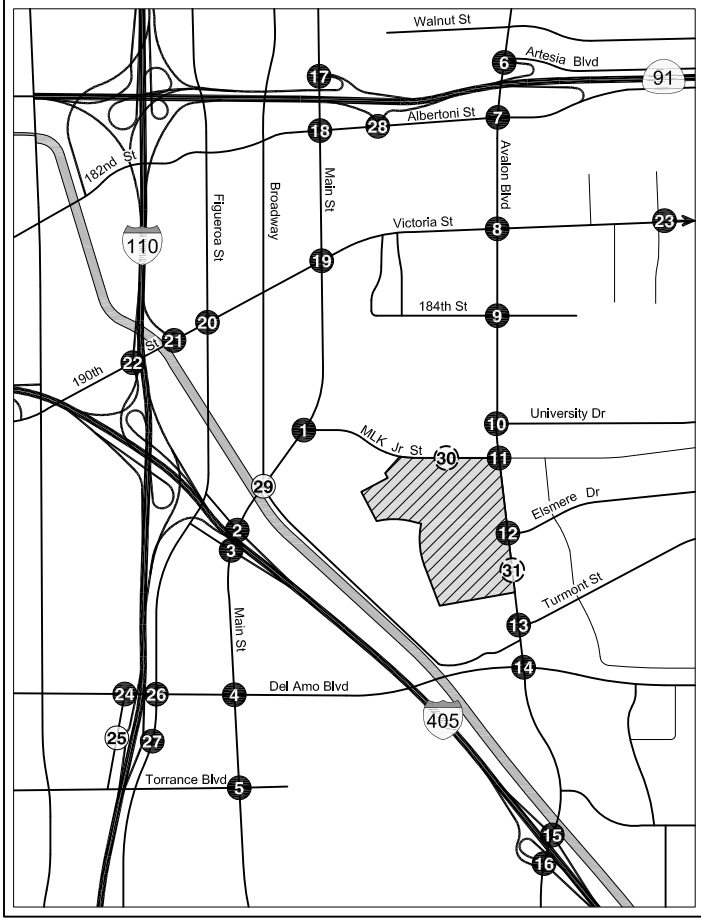
16. Avalon Boulevard & I-405 SB Ramps

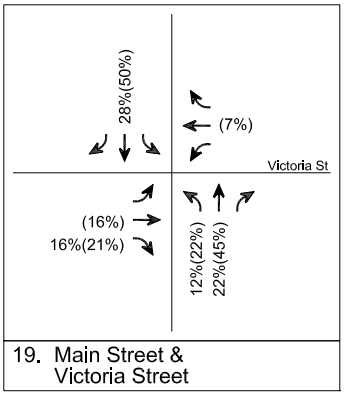


17. Main Street & SR-91 WB Ramps

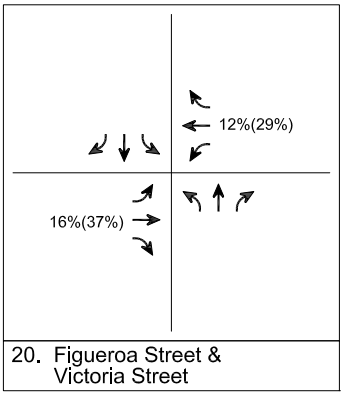


18. Main Street & Albertoni Street





19. Main Street & Victoria Street



20. Figueroa Street & Victoria Street

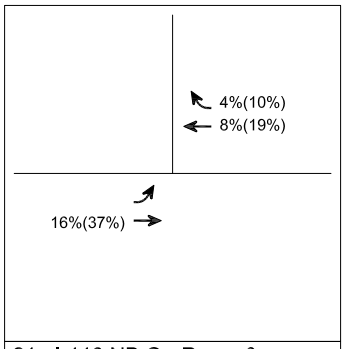
LEGEND

- Project Site
- Signalized Intersection
- Unsignalized Intersection
- Future Intersection
- %(%) Inbound(Outbound) Trip Percentage

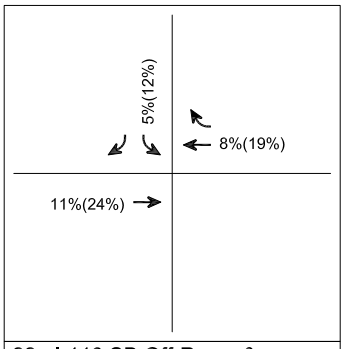
N
Not to Scale

PROJECT TRIP DISTRIBUTION
WEEKDAY

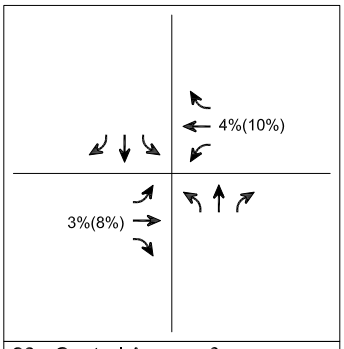
FIGURE
3 (CONT.)



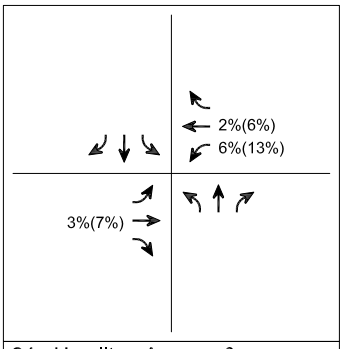
21. I-110 NB On-Ramp & 190th Street



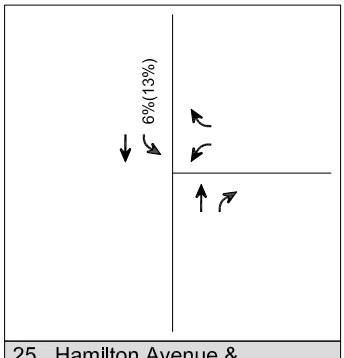
22. I-110 SB Off-Ramp & 190th Street



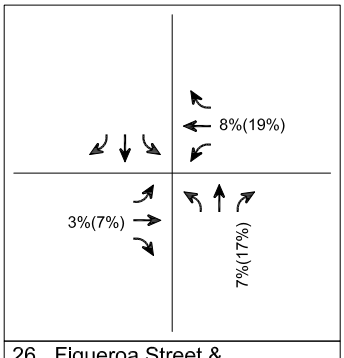
23. Central Avenue & Victoria Street



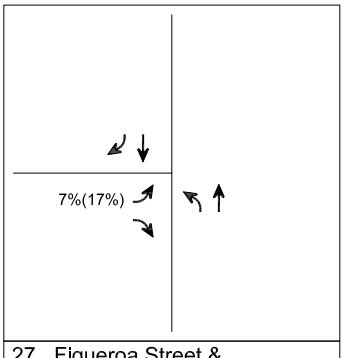
24. Hamilton Avenue & Del Amo Boulevard



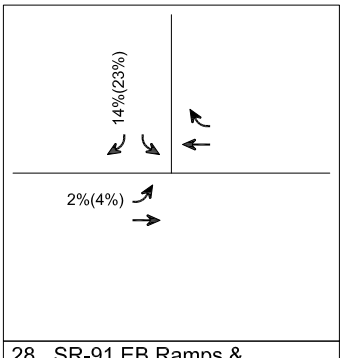
25. Hamilton Avenue & I-110 SB Ramps



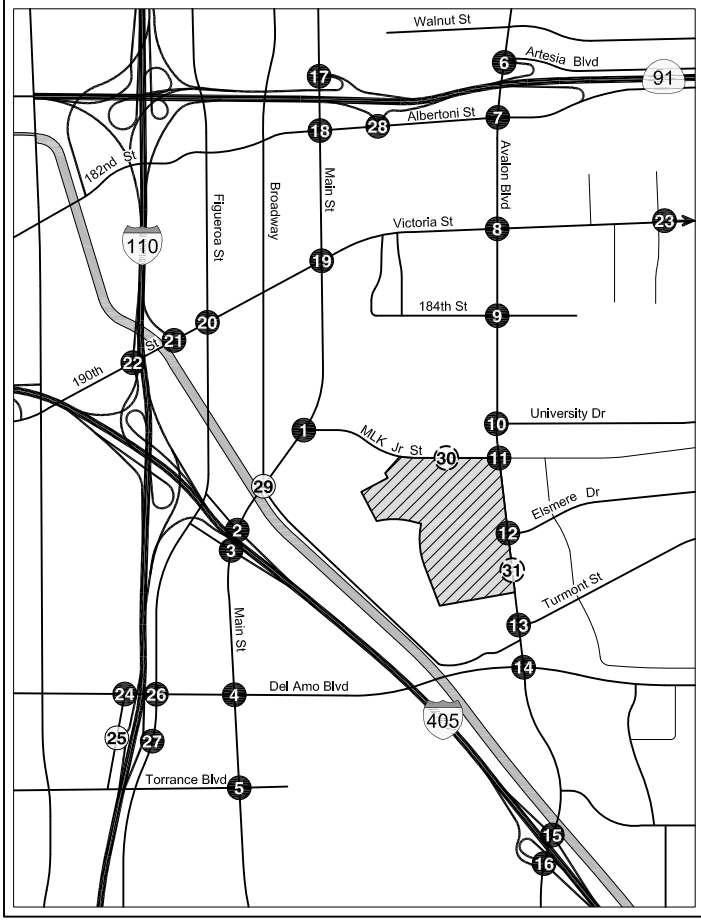
26. Figueroa Street & Del Amo Boulevard

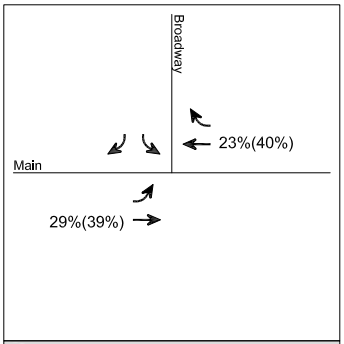


27. Figueroa Street & I-110 NB Ramps

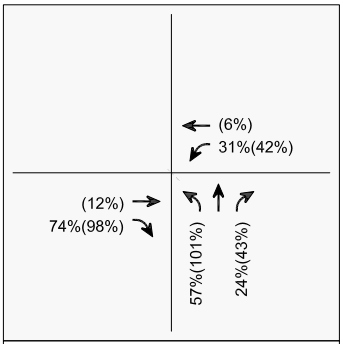


28. SR-91 EB Ramps & Albertoni Street





29. Main Street & Broadway

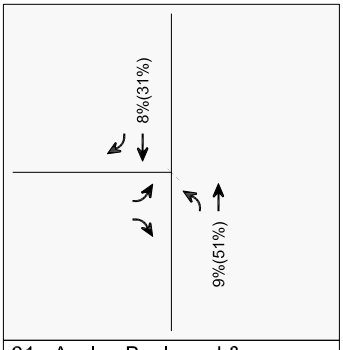


30. New Driveway & Martin Luther King Jr Street

N
Not to Scale

LEGEND

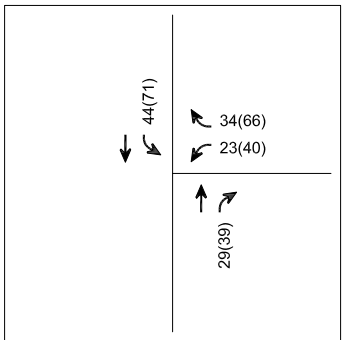
- Project Site
- # Signalized Intersection
- # Unsignalized Intersection
- # Future Intersection
- %(%) Inbound(Outbound) Trip Percentage



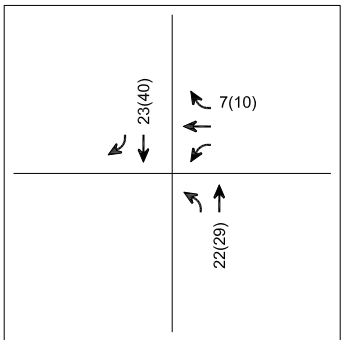
31. Avalon Boulevard & New Driveway

PROJECT TRIP DISTRIBUTION
WEEKDAY

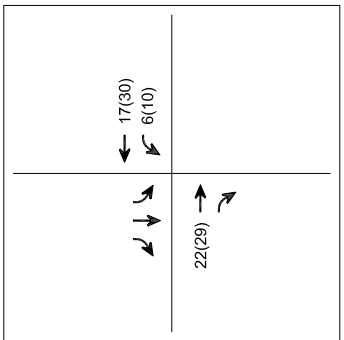
FIGURE
3 (CONT.)



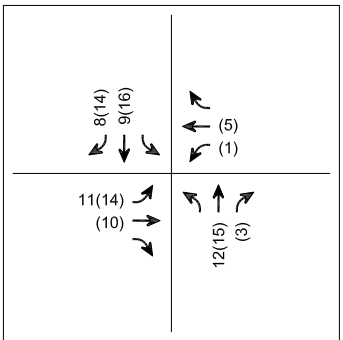
1. Main Street & MLK Jr Street



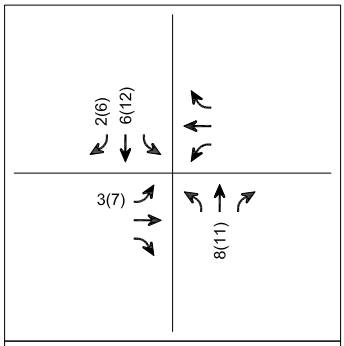
2. Main Street & I-405 NB Off-Ramp



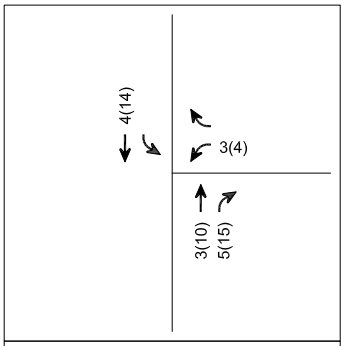
3. Main Street & I-405 SB On-Ramp



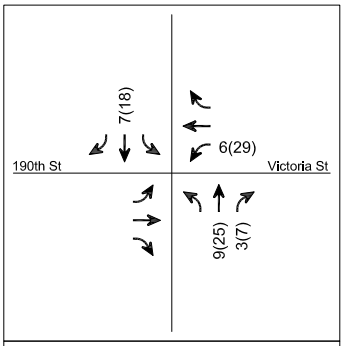
4. Main Street & Del Amo Boulevard



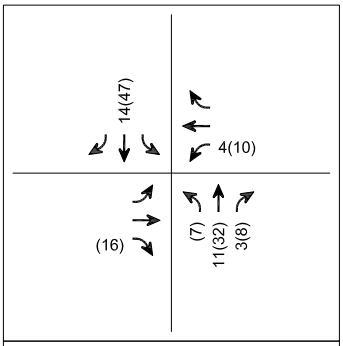
5. Main Street & Torrance Boulevard



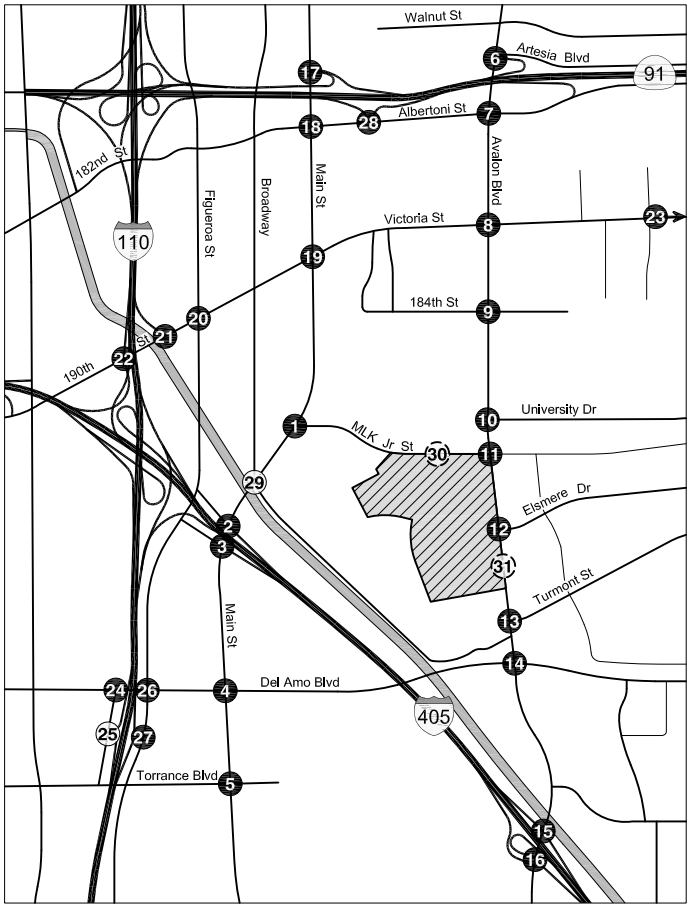
6. Avalon Boulevard & SR-91 WB On-Ramp

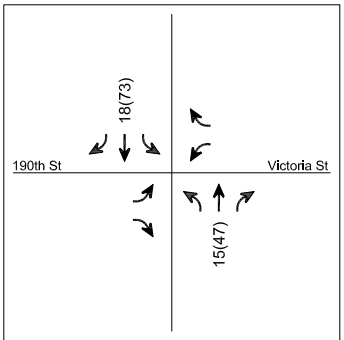


7. Avalon Boulevard & Albertoni Street

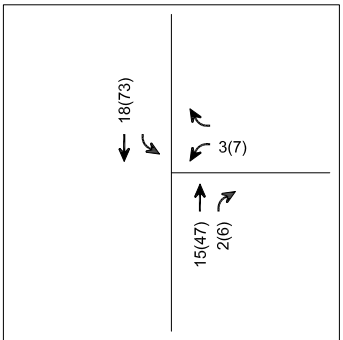


8. Avalon Boulevard & Victoria Street





9. Avalon Boulevard & 184th St / StubHub Center



10. Avalon Boulevard & University Drive

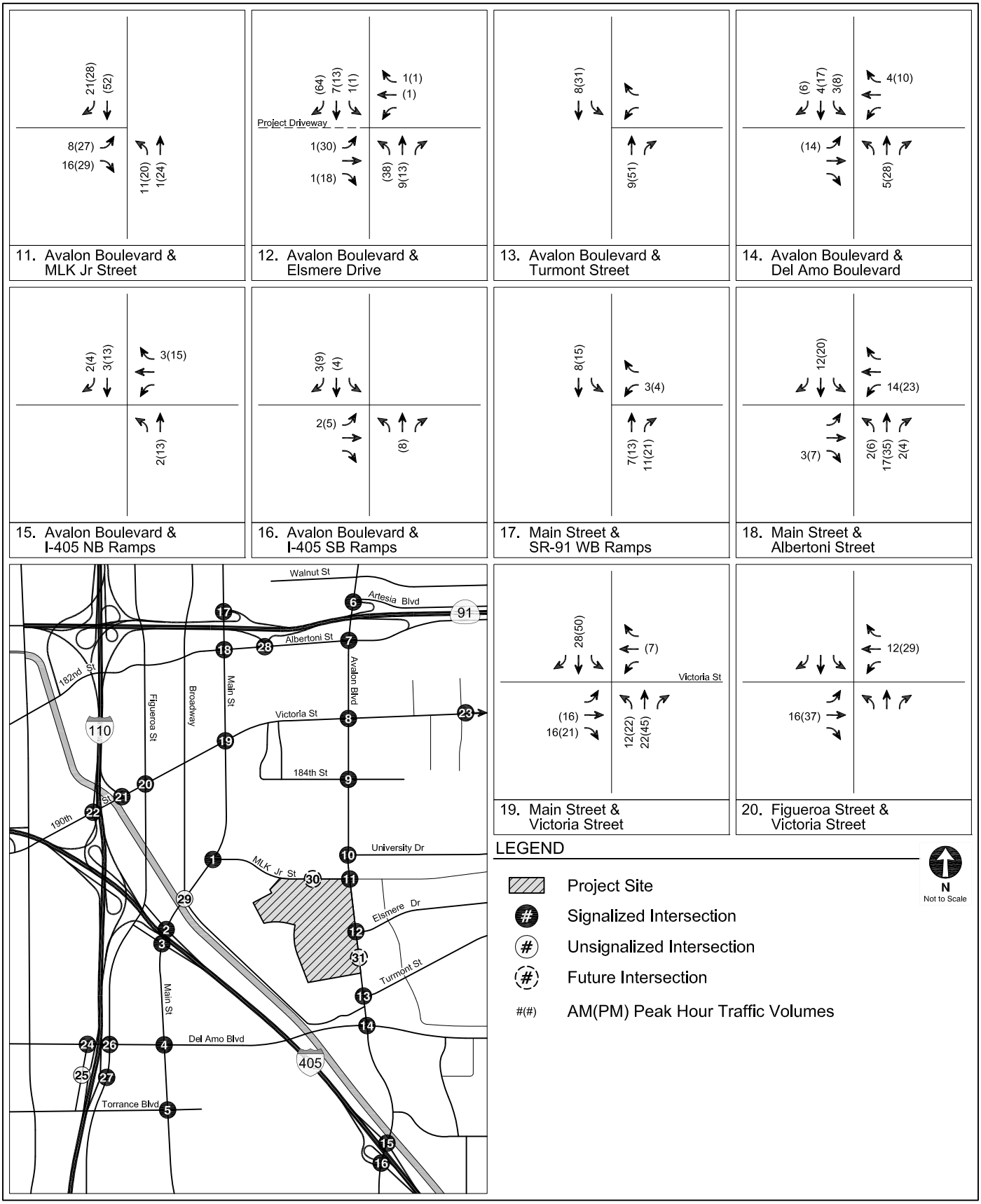
LEGEND

- Project Site
- # Signalized Intersection
- # Unsignalized Intersection
- # Future Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

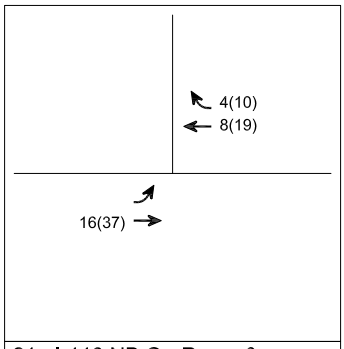
PROJECT-ONLY
WEEKDAY PEAK HOUR TRAFFIC VOLUMES

FIGURE
4

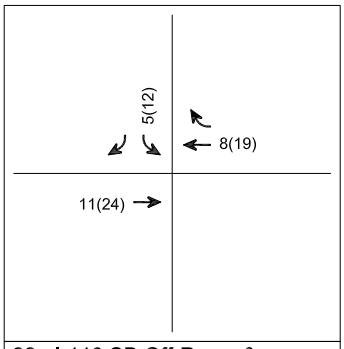


PROJECT-ONLY
WEEKDAY PEAK HOUR TRAFFIC VOLUMES

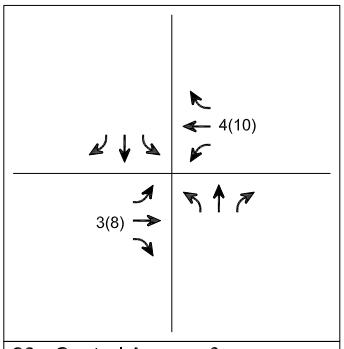
FIGURE
4 (CONT.)



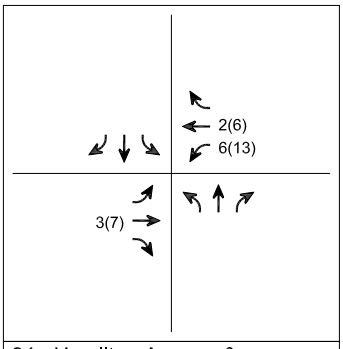
21. I-110 NB On-Ramp & 190th Street



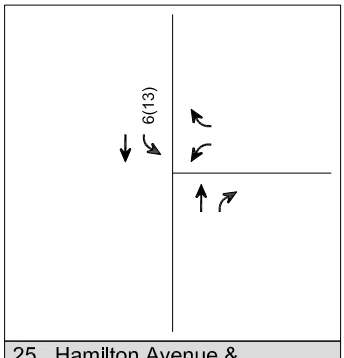
22. I-110 SB Off-Ramp & 190th Street



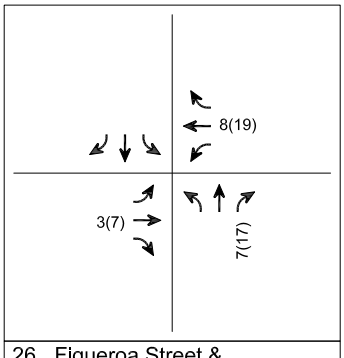
23. Central Avenue & Victoria Street



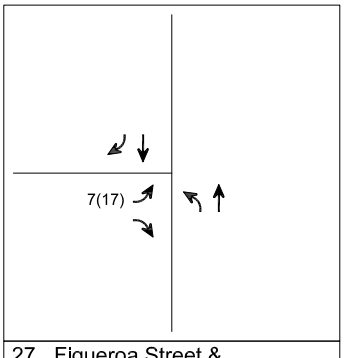
24. Hamilton Avenue & Del Amo Boulevard



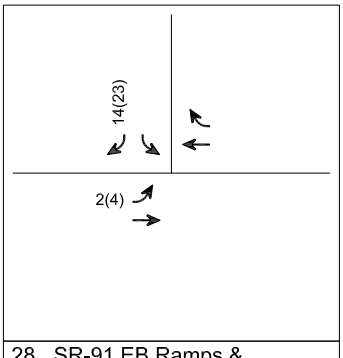
25. Hamilton Avenue & I-110 SB Ramps



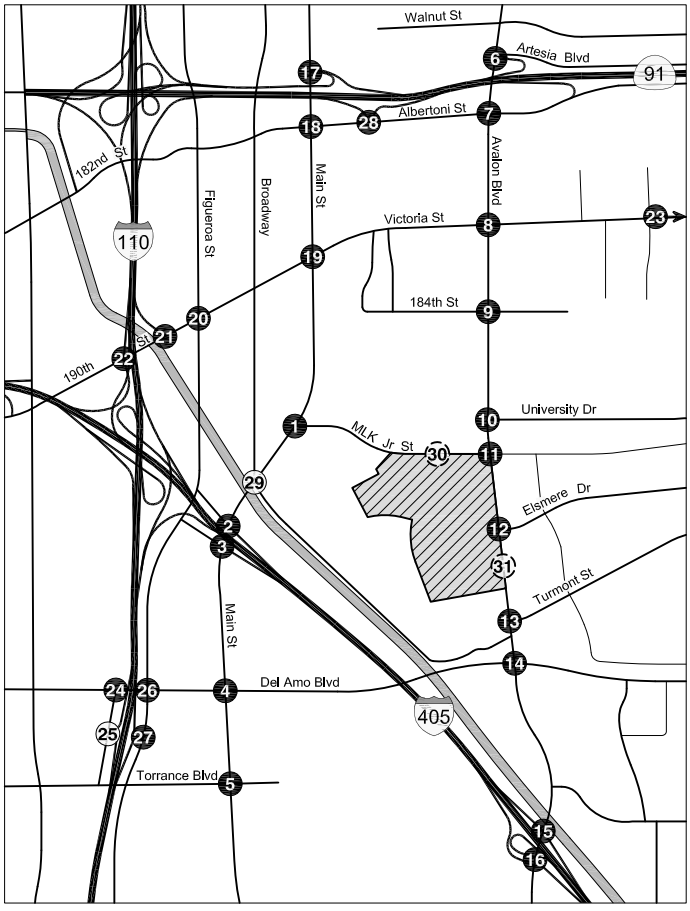
26. Figueroa Street & Del Amo Boulevard

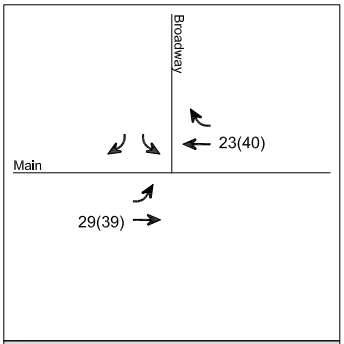


27. Figueroa Street & I-110 NB Ramps

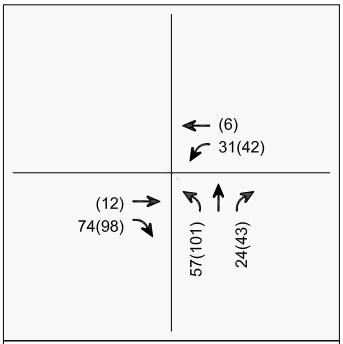


28. SR-91 EB Ramps & Albertoni Street





29. Main Street & Broadway

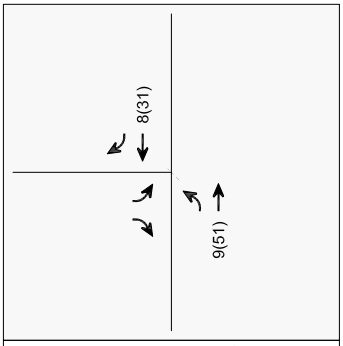


30. New Driveway & Martin Luther King Jr Street

N
Not to Scale

LEGEND

- Project Site
- # Signalized Intersection
- # Unsignalized Intersection
- # Future Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes



31. Avalon Boulevard & New Driveway

PROJECT-ONLY
WEEKDAY PEAK HOUR TRAFFIC VOLUMES

FIGURE
4 (CONT.)

SOURCE: MEIS, November 2018.

CONCEPTUAL SITE PLAN

FIGURE 5

TABLE 3
RELATED PROJECT LIST

No.	Address / Project Name	Description	Weekday Trip Generation [a]						Weekend Trip Generation [a]		
			Daily	Morning Peak Hour			Afternoon Peak Hour			Saturday Peak Hour	
				In	Out	Total	In	Out	Total	In	Out	Total
1	21521 S Avalon Blvd Carson, CA	357 apartment units, 30,700 sf retail	3,685	54	156	210	199	13	336	197	191	388
2	1281 E University Dr Carson, CA	47,000 sf retail	2,007	27	16	43	84	91	175	110	102	212
3	21205 S Main St Carson, CA	46 apartment units	306	5	19	24	19	10	29	16	16	32
4	17706 S Main St Gardena, CA	94,731 sf warehouse, 15,000 sf office	503	43	9	52	11	41	53	7	6	13
5	19210 S Vermont Ave, Gardena, CA	61,500 sf office	677	84	11	95	16	76	92	18	15	33
6	1054 W 204th St Torrance, CA [b] [c]	8.5 acre park	425	3	3	6	2	2	4	1	1	2
7	Development District #3 (11 acres) Carson, CA [d	300 dwelling units	1,580	27	109	136	84	45	129	105	105	210
8	The District at South Bay Carson, CA [e][f]	581,000 sf shopping center	12,388	228	85	313	446	502	948	592	546	1,138
9	The Creek at Dominguez Hills Carson, CA	71,000 sf marketplace, 51,000 sf restaurant, indoor sports complex, 30,000 sf youth learning experience, 7,500 sf indoor skydiving, enhanced driving range experience and putting green, 40,000 sf clubhouse, 36,000 sf sports wellness facility, zipline course, 6.6 acre park	16,132	580	384	964	727	669	1,396	878	912	1,790
TOTAL PROJECTED RELATED PROJECT GROWTH			**37,703**	**1,051**	**792**	**1,843**	**1,588**	**1,449**	**3,162**	**1,924**	**1,894**	**3,818**

Notes:

[a] All Trip generation estimates based on The District at South Bay DEIR Fehr & Peers, 2017. All related projects fall within 1.5 miles of the Kimmelman Site.

[b] Trip generation estimates for parks based on information provided by the "Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region", April 2002

[c] Related projects provided by LA County on July 11th

[d] The 11 acre parcel north of Del Amo was previously included in the Carson Marketplace Project but was sold separately and is not longer part of modified project description for THE DISTRICT AT SOUTH BAY.

[e] Review of The District development phasing indicates that only the 581,000 sf shopping center portion is anticipated to be completed and operational by the Project opening year.

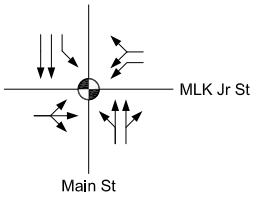
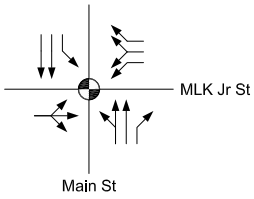
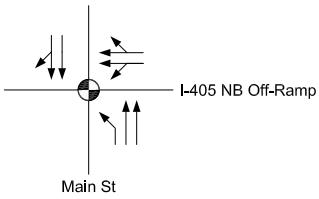
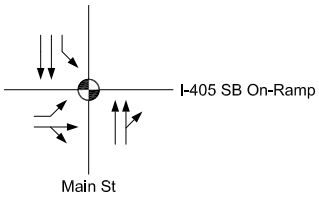
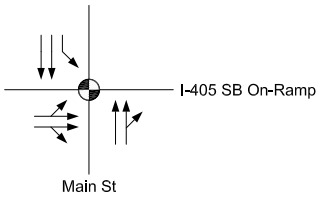
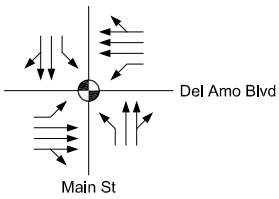
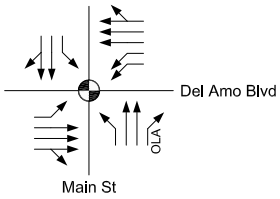
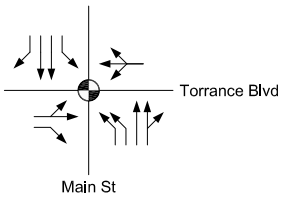
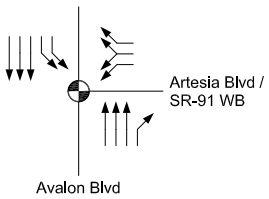
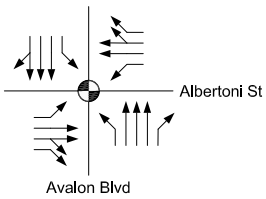
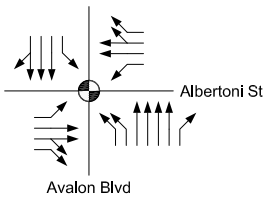
[f] Weekend volumes estimated by growing weekday afternoon peak hour volumes by a factor of 1.2 trips. This is based on the difference between weekday afternoon peak hour and Saturday peak hour of generator data for a shopping center (ITE 820) in Trip Generation ITE 10th edition, 2017.

Appendix B

Intersection Lane Configurations

LEGEND

Signalized Intersection

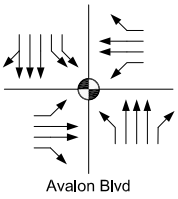
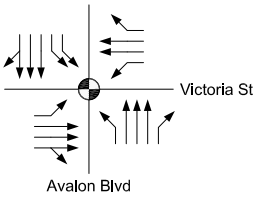
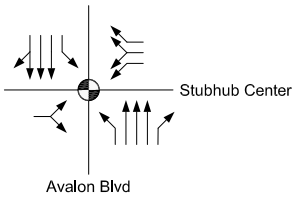
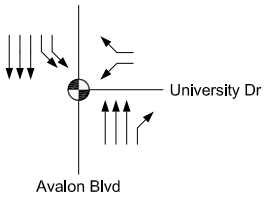
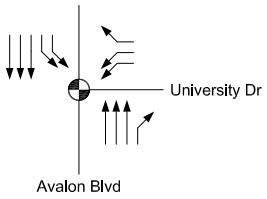
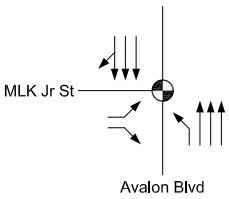
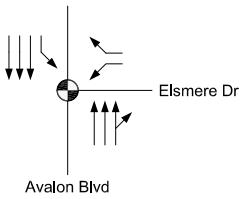
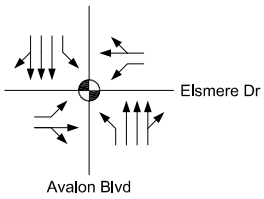
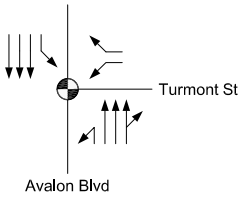
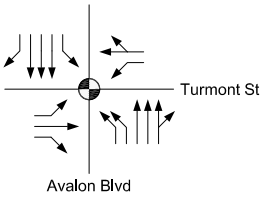
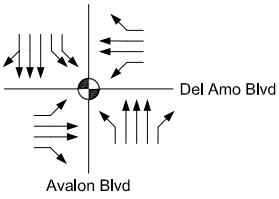
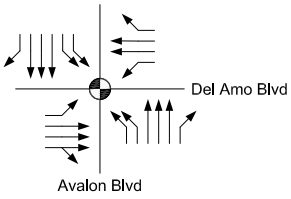
	EXISTING CONDITIONS (YEAR 2018)	FUTURE WITH PROJECT CONDITIONS (YEAR 2020)	FUTURE WITH PROJECT WITH MITIGATION CONDITIONS (YEAR 2020)
1. Main Street & MLK Jr Street		Same as Existing Conditions	
2. Main Street & I-405 NB Off-Ramp		Same as Existing Conditions	Same as Existing Conditions
3. Main Street & I-405 SB On-Ramp		Same as Existing Conditions	
4. Main Street & Del Amo Boulevard		Same as Existing Conditions	
5. Main Street & Torrance Boulevard		Same as Existing Conditions	Same as Existing Conditions
6. Avalon Boulevard & Artesia Boulevard / SR-91 WB On-Ramp		Same as Existing Conditions	Same as Existing Conditions
7. Avalon Boulevard & Albertoni Street		Same as Existing Conditions	

INTERSECTION LANE CONFIGURATIONS

APPENDIX B

LEGEND

Signalized Intersection

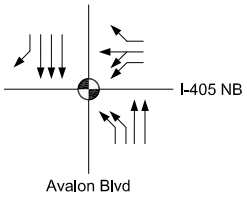
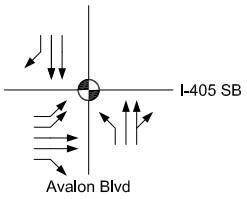
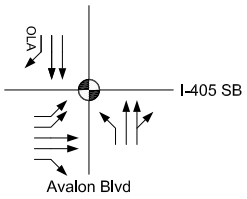
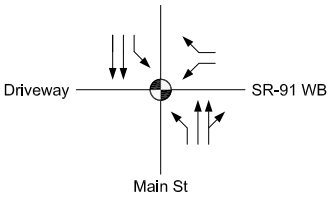
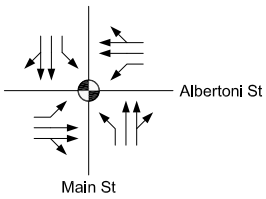
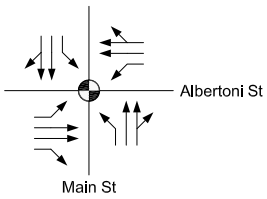
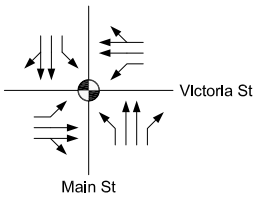
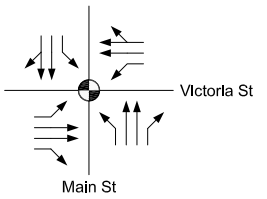
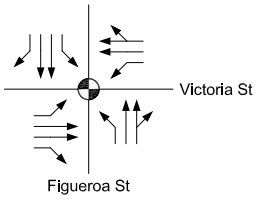
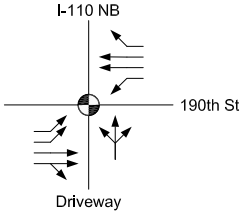
	EXISTING CONDITIONS (YEAR 2018)	FUTURE WITH PROJECT CONDITIONS (YEAR 2020)	FUTURE WITH PROJECT WITH MITIGATION CONDITIONS (YEAR 2020)
8. Avalon Boulevard & Victoria Street		Same as Existing Conditions	
9. Avalon Boulevard & 184th Street / Stubhub Center Gate		Same as Existing Conditions	Same as Existing Conditions
10. Avalon Boulevard & University Drive		Same as Existing Conditions	
11. Avalon Boulevard & MLK Jr Street		Same as Existing Conditions	Same as Existing Conditions
12. Avalon Boulevard & Elsmere Drive			Same as Future with Project Conditions
13. Avalon Boulevard & Turmont Street			Same as Future with Project Conditions
14. Avalon Boulevard & Del Amo Boulevard		Same as Existing Conditions	

INTERSECTION LANE CONFIGURATIONS

APPENDIX B

LEGEND

Signalized Intersection

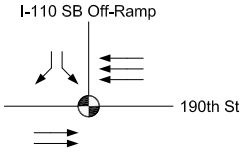
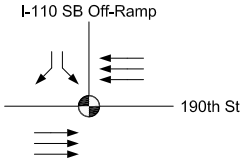
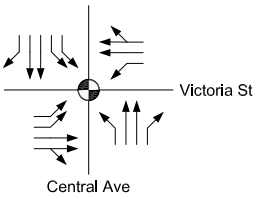
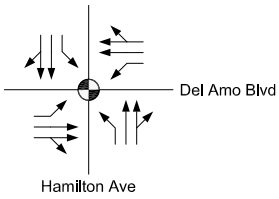
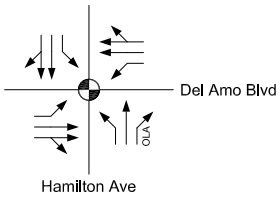
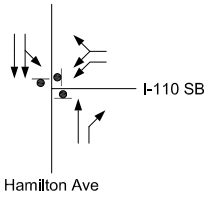
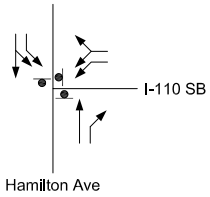
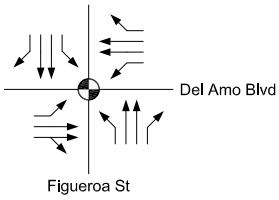
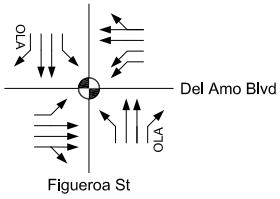
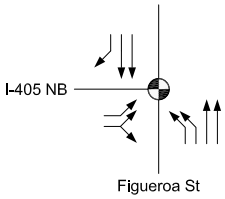
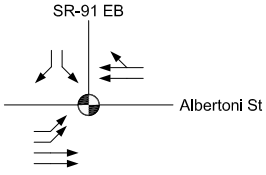
	EXISTING CONDITIONS (YEAR 2018)	FUTURE WITH PROJECT CONDITIONS (YEAR 2020)	FUTURE WITH PROJECT WITH MITIGATION CONDITIONS (YEAR 2020)
15. Avalon Boulevard & I-405 NB Ramps		Same as Existing Conditions	Same as Existing Conditions
16. Avalon Boulevard & I-405 SB Ramps		Same as Existing Conditions	
17. Main Street & SR-91 WB Ramps		Same as Existing Conditions	Same as Existing Conditions
18. Main Street & Albertoni Street		Same as Existing Conditions	
19. Main Street & Victoria Street		Same as Existing Conditions	
20. Figueroa Street & Victoria Street		Same as Existing Conditions	Same as Existing Conditions
21. I-110 NB On-Ramp & 190th Street		Same as Existing Conditions	Same as Existing Conditions

INTERSECTION LANE CONFIGURATIONS

APPENDIX B

LEGEND

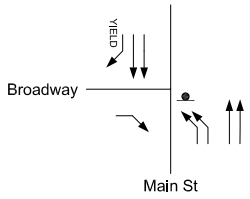
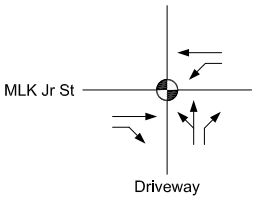
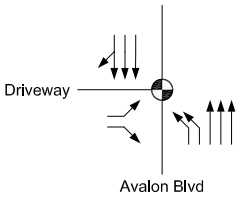
- Signalized Intersection
- Stop Sign

	EXISTING CONDITIONS (YEAR 2018)	FUTURE WITH PROJECT CONDITIONS (YEAR 2020)	FUTURE WITH PROJECT WITH MITIGATION CONDITIONS (YEAR 2020)
22. I-110 SB Off-Ramp & 190th Street		Same as Existing Conditions	
23. Central Avenue & Victoria Street		Same as Existing Conditions	Same as Existing Conditions
24. Hamilton Avenue & Del Amo Boulevard		Same as Existing Conditions	
25. Hamilton Avenue & I-110 SB Ramps		Same as Existing Conditions	
26. Figueroa Street & Del Amo Boulevard		Same as Existing Conditions	
27. Figueroa Street & I-110 NB Ramps		Same as Existing Conditions	Same as Existing Conditions
28. SR-91 EB Ramps & Albertoni Street		Same as Existing Conditions	Same as Existing Conditions

LEGEND

Signalized Intersection

Stop Sign

	EXISTING CONDITIONS (YEAR 2018)	FUTURE WITH PROJECT CONDITIONS (YEAR 2020)	FUTURE WITH PROJECT WITH MITIGATION CONDITIONS (YEAR 2020)
29. Main Street & Broadway		Same as Existing Conditions	Same as Existing Conditions
30. New Driveway & MLK Jr Street	New Intersection		Same as Future with Project Conditions
31. Avalon Boulevard & New Driveway	New Intersection		Same as Future with Project Conditions

INTERSECTION LANE CONFIGURATIONS

APPENDIX B

Appendix C

Turning Movement Counts

National Data & Surveying Services Intersection Turning Movement Count

Location: Main St & 192nd St
City: Carson
Control: Signalized

Project ID: 18-05081-001
Date: 2/1/2018

Total

NS/EW Streets:	Main St				Main St				192nd St				192nd St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	1	2	0	0	0	1	0	0	2	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	73	8	0	8	94	0	0	0	0	0	0	27	0	20	0	230
7:15 AM	1	72	20	0	13	155	0	0	0	0	1	0	40	0	26	0	328
7:30 AM	1	123	25	0	8	175	0	0	0	0	0	0	41	0	29	0	402
7:45 AM	1	119	37	0	33	115	0	0	0	0	0	0	43	0	31	0	379
8:00 AM	1	141	54	0	14	95	0	0	1	0	2	0	35	0	33	0	376
8:15 AM	0	115	26	0	16	81	1	0	0	0	1	0	25	0	30	0	295
8:30 AM	0	81	43	0	11	91	1	0	0	0	0	0	20	0	20	0	267
8:45 AM	2	81	24	0	8	92	0	0	0	0	0	0	15	0	21	0	243
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	6	805	237	0	111	898	2	0	1	0	4	0	246	0	210	0	2520
APPROACH %'s :	0.57%	76.81%	22.61%	0.00%	10.98%	88.82%	0.20%	0.00%	20.00%	0.00%	80.00%	0.00%	53.95%	0.00%	46.05%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	4	455	136	0	68	540	0	0	1	0	3	0	159	0	119	0	1485
PEAK HR FACTOR :	1.000	0.807	0.630	0.000	0.515	0.771	0.000	0.000	0.250	0.000	0.375	0.000	0.924	0.000	0.902	0.000	0.924
		0.759				0.831				0.333				0.939			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	1	2	0	0	0	1	0	0	2	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	106	43	0	27	138	0	0	0	0	1	0	23	0	20	0	358
4:15 PM	0	128	43	0	52	148	1	0	0	0	1	0	22	0	21	0	416
4:30 PM	0	125	43	0	58	151	0	0	0	0	0	0	28	0	20	0	425
4:45 PM	1	146	50	0	46	125	0	0	0	0	0	0	22	0	17	0	407
5:00 PM	2	132	66	0	50	181	0	0	0	0	0	0	25	0	25	0	481
5:15 PM	0	134	52	0	60	149	0	0	0	0	1	0	24	0	20	0	440
5:30 PM	0	116	61	0	47	191	0	0	0	0	2	0	26	0	18	0	461
5:45 PM	0	136	57	0	58	137	0	0	0	0	0	0	20	0	14	0	422
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	3	1023	415	0	398	1220	1	0	0	0	5	0	190	0	155	0	3410
APPROACH %'s :	0.21%	70.99%	28.80%	0.00%	24.58%	75.36%	0.06%	0.00%	0.00%	0.00%	100.00%	0.00%	55.07%	0.00%	44.93%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	2	518	236	0	215	658	0	0	0	0	3	0	95	0	77	0	1804
PEAK HR FACTOR :	0.250	0.952	0.894	0.000	0.896	0.861	0.000	0.000	0.000	0.000	0.375	0.000	0.913	0.000	0.770	0.000	0.938
		0.945				0.917				0.375				0.860			

Prepared by National Data & Surveying Services

Main St & 192nd St

Peak Hour Turning Movement Count

ID: 18-05081-001
City: Carson

Day: Thursday
Date: 02/01/2018

PEAK HOURS	COUNT PERIODS
07:15 AM - 08:15 AM	07:00 AM - 09:00 AM
NONE	NONE
05:00 PM - 06:00 PM	04:00 PM - 06:00 PM

SOUTHBOUND (Main St)

AM	0	540	68	0	575	AM
NOON	0	0	0	0	0	NOON
PM	0	658	215	0	595	PM

EASTBOUND (192nd St)

AM	NOON	PM	
4	0	2	⇦
0	0	0	0
1	0	0	0
0	0	0	1
3	0	3	0
AM	NOON	PM	

WESTBOUND (192nd St)

PM	NOON	AM	
77	0	119	1
0	0	0	0
95	0	159	2
0	0	0	0
451	0	204	⇨
PM	NOON	AM	

NORTHBOUND (Main St)

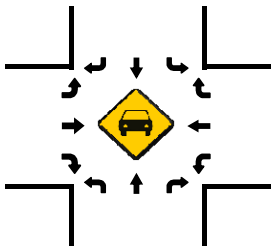
PM	756	0	2	518	236	PM
NOON	0	0	0	0	0	NOON
AM	702	0	4	455	136	AM

CONTROL

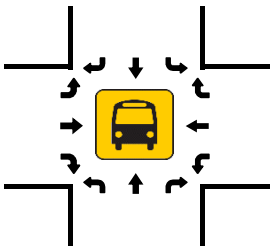
Signalized

TEV	1485 AM	0 NOON	1804 PM
PHF	0.92		0.94

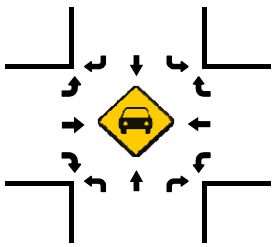
Total Vehicles (AM)



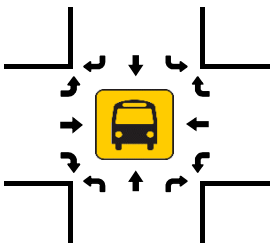
Total Vehicles (AM)



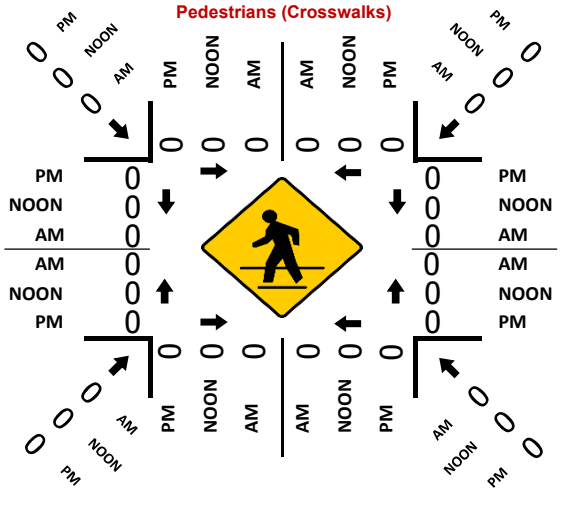
Total Vehicles (NOON)



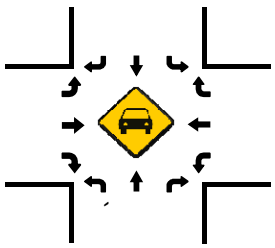
Total Vehicles (NOON)



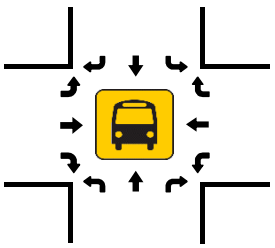
Pedestrians (Crosswalks)



Total Vehicles (PM)



Total Vehicles (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Main St & I-405 NB Off Ramp
City: Carson
Control: Signalized

Project ID: 18-05081-002
Date: 2/1/2018

Total

NS/EW Streets:	Main St				Main St				I-405 NB Off Ramp				I-405 NB Off Ramp				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	0	1.5	0.5	0	0	0	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	81	0	0	0	135	17	0	0	0	0	0	14	71	44	0	362
7:15 AM	7	90	0	0	0	189	22	0	0	0	0	0	13	81	37	0	439
7:30 AM	8	143	0	0	0	240	23	0	0	0	0	0	17	78	56	0	565
7:45 AM	5	174	0	0	0	208	19	0	0	0	0	0	32	82	67	0	587
8:00 AM	6	189	0	0	0	142	16	0	0	0	0	0	21	88	56	0	518
8:15 AM	9	151	0	0	0	134	12	0	0	0	0	0	17	76	53	0	452
8:30 AM	6	129	0	0	0	125	13	0	0	0	0	0	23	69	55	0	420
8:45 AM	2	118	0	0	0	128	13	0	0	0	0	0	16	83	52	0	412
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	43	1075	0	0	0	1301	135	0	0	0	0	0	153	628	420	0	3755
APPROACH %'s :	3.85%	96.15%	0.00%	0.00%	0.00%	90.60%	9.40%	0.00%					12.74%	52.29%	34.97%	0.00%	
PEAK HR :	**07:30 AM - 08:30 AM**																TOTAL
PEAK HR VOL :	28	657	0	0	0	724	70	0	0	0	0	0	87	324	232	0	2122
PEAK HR FACTOR :	0.778	0.869	0.000	0.000	0.000	0.754	0.761	0.000	0.000	0.000	0.000	0.000	0.680	0.920	0.866	0.000	0.904
	0.878				0.755								0.888				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	0	1.5	0.5	0	0	0	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	4	149	0	0	0	247	16	0	0	0	0	0	13	33	53	0	515
4:15 PM	4	173	0	0	0	302	13	0	0	0	0	0	22	29	46	0	589
4:30 PM	7	145	0	0	0	283	23	0	0	0	0	0	14	26	50	0	548
4:45 PM	3	180	0	0	0	252	17	0	0	0	0	0	22	26	69	0	569
5:00 PM	5	181	0	0	0	333	20	0	0	0	0	0	12	31	53	0	635
5:15 PM	3	175	0	0	0	322	12	0	0	0	0	0	9	31	61	0	613
5:30 PM	7	160	0	0	0	300	34	0	0	0	0	0	26	32	62	0	621
5:45 PM	6	158	0	0	0	280	26	0	0	0	0	0	14	27	60	0	571
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	39	1321	0	0	0	2319	161	0	0	0	0	0	132	235	454	0	4661
APPROACH %'s :	2.87%	97.13%	0.00%	0.00%	0.00%	93.51%	6.49%	0.00%					16.08%	28.62%	55.30%	0.00%	
PEAK HR :	**05:00 PM - 06:00 PM**																TOTAL
PEAK HR VOL :	21	674	0	0	0	1235	92	0	0	0	0	0	61	121	236	0	2440
PEAK HR FACTOR :	0.750	0.931	0.000	0.000	0.000	0.927	0.676	0.000	0.000	0.000	0.000	0.000	0.587	0.945	0.952	0.000	0.961
	0.934				0.940								0.871				

Prepared by National Data & Surveying Services

Main St & I-405 NB Off Ramp

Peak Hour Turning Movement Count

ID: 18-05081-002
City: Carson

Day: Thursday
Date: 02/01/2018

PEAK HOURS

AM	07:30 AM - 08:30 AM
NOON	NONE
PM	05:00 PM - 06:00 PM

COUNT PERIODS

AM	07:00 AM - 09:00 AM
NOON	NONE
PM	04:00 PM - 06:00 PM

Main St — SOUTHBOUND

AM	70	724	0	0	889	AM
NOON	0	0	0	0	0	NOON
PM	92	1235	0	0	910	PM

I-405 NB Off Ramp — EASTBOUND

AM	NOON	PM	
422	0	234	⇦
0	0	0	0 ↶
0	0	0	0 ↱
0	0	0	0 →
0	0	0	0 ↷

I-405 NB Off Ramp — WESTBOUND

PM	NOON	AM	
236	0	232	0 ↶
121	0	324	2 ←
61	0	87	0 ↰
0	0	0	0 ↷
0	0	0	⇨

Main St — NORTHBOUND

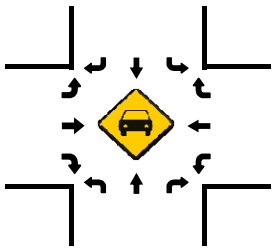
PM	1296	0	21	674	0	PM
NOON	0	0	0	0	0	NOON
AM	811	0	28	657	0	AM

0.5	1.5	0	0	
				⇧
0	1	2	0	

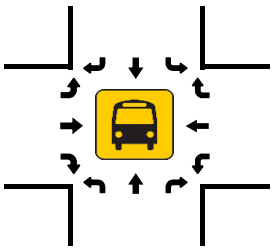
CONTROL: Signalized

TEV	2122 AM	0 NOON	2440 PM
PHF	0.90		0.96

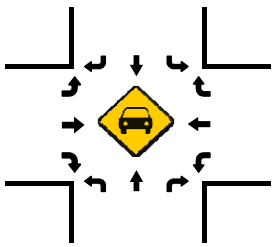
Total Vehicles (AM)



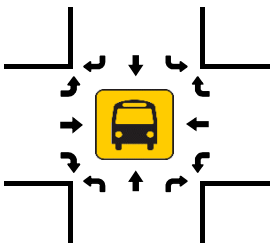
Total Vehicles (AM)



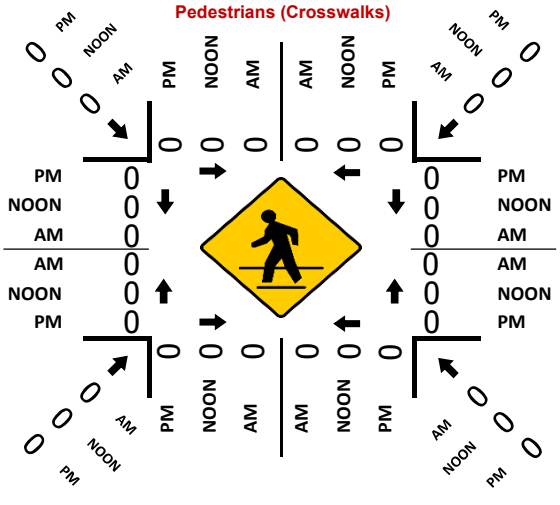
Total Vehicles (NOON)



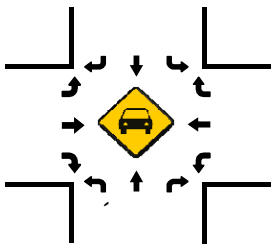
Total Vehicles (NOON)



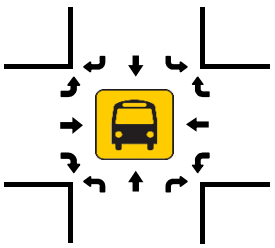
Pedestrians (Crosswalks)



Total Vehicles (PM)



Total Vehicles (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Main St & I-405 SB On Ramp
City: Carson
Control: Signalized

Project ID: 18-05081-003
Date: 2/1/2018

Total

NS/EW Streets:	Main St				Main St				I-405 SB On Ramp				I-405 SB On Ramp				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1.5	0.5	0	1	2	0	0	1	0.5	0.5	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	77	16	0	27	127	0	0	3	20	2	0	0	0	0	0	272
7:15 AM	0	100	11	0	37	166	0	0	9	19	3	0	0	0	0	0	345
7:30 AM	0	134	11	0	45	206	0	0	7	19	10	0	0	0	0	0	432
7:45 AM	0	175	16	0	29	216	0	0	5	18	4	0	0	0	0	0	463
8:00 AM	0	190	14	0	34	135	0	1	8	15	4	0	0	0	0	0	401
8:15 AM	0	149	10	0	24	119	0	0	9	19	5	0	0	0	0	0	335
8:30 AM	0	125	11	0	29	128	0	0	9	16	3	0	0	0	0	0	321
8:45 AM	0	113	16	0	30	111	0	1	6	21	3	0	0	0	0	0	301
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1063	105	0	255	1208	0	2	56	147	34	0	0	0	0	0	2870
APPROACH %'s :	0.00%	91.01%	8.99%	0.00%	17.41%	82.46%	0.00%	0.14%	23.63%	62.03%	14.35%	0.00%					
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	599	52	0	145	723	0	1	29	71	21	0	0	0	0	0	1641
PEAK HR FACTOR :	0.000	0.788	0.813	0.000	0.806	0.837	0.000	0.250	0.806	0.934	0.525	0.000	0.000	0.000	0.000	0.000	0.886
		0.798				0.866				0.840							

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1.5	0.5	0	1	2	0	0	1	0.5	0.5	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	138	26	0	53	195	0	1	16	56	7	0	0	0	0	0	492
4:15 PM	0	148	24	0	64	267	0	1	23	65	11	0	0	0	0	0	603
4:30 PM	0	145	26	0	58	231	0	3	10	93	5	0	0	0	0	0	571
4:45 PM	0	162	19	0	66	205	0	2	18	62	13	0	0	0	0	0	547
5:00 PM	0	168	30	0	68	276	0	0	17	68	11	0	0	0	0	0	638
5:15 PM	0	161	29	0	72	251	0	1	16	77	9	0	0	0	0	0	616
5:30 PM	0	156	27	0	62	274	0	0	16	69	16	0	0	0	0	0	620
5:45 PM	0	154	23	0	69	224	0	0	12	62	6	0	0	0	0	0	550
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1232	204	0	512	1923	0	8	128	552	78	0	0	0	0	0	4637
APPROACH %'s :	0.00%	85.79%	14.21%	0.00%	20.96%	78.71%	0.00%	0.33%	16.89%	72.82%	10.29%	0.00%					
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	639	109	0	271	1025	0	1	61	276	42	0	0	0	0	0	2424
PEAK HR FACTOR :	0.000	0.951	0.908	0.000	0.941	0.928	0.000	0.250	0.897	0.896	0.656	0.000	0.000	0.000	0.000	0.000	0.950
		0.944				0.943				0.929							

Prepared by National Data & Surveying Services

Main St & I-405 SB On Ramp

Peak Hour Turning Movement Count

ID: 18-05081-003
City: Carson

Day: Thursday
Date: 02/01/2018

PEAK HOURS	COUNT PERIODS
07:15 AM - 08:15 AM	07:00 AM - 09:00 AM
NONE	NONE
05:00 PM - 06:00 PM	04:00 PM - 06:00 PM

Main St — SOUTHBOUND

AM	0	723	145	1	629	AM
NOON	0	0	0	0	0	NOON
PM	0	1025	271	1	701	PM

I-405 SB On Ramp — EASTBOUND

AM	NOON	PM	
0	0	0	
0	0	0	0
29	0	61	1
71	0	276	0.5
21	0	42	0.5
AM	NOON	PM	

I-405 SB On Ramp — WESTBOUND

PM	NOON	AM	
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
656	0	268	
PM	NOON	AM	

Main St — NORTHBOUND

PM	1067	0	0	639	109	PM
NOON	0	0	0	0	0	NOON
AM	744	0	0	599	52	AM

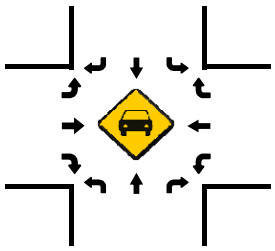
0	2	1	0	
			0	0	1.5	0.5

CONTROL

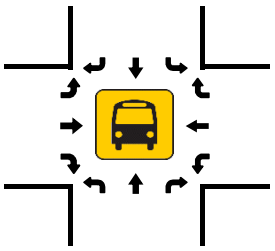
Signalized

TEV	1641 AM	0 NOON	2424 PM
PHF	0.89		0.95

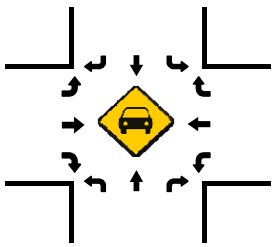
Total Vehicles (AM)



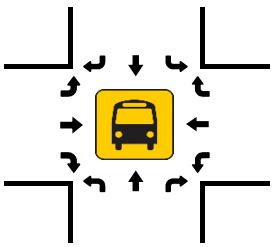
Total Vehicles (AM)



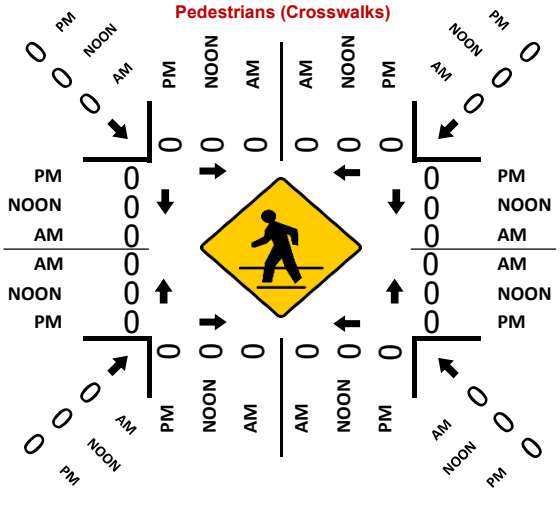
Total Vehicles (NOON)



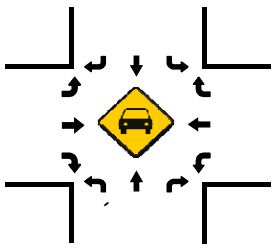
Total Vehicles (NOON)



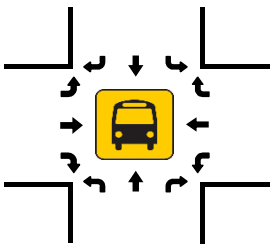
Pedestrians (Crosswalks)



Total Vehicles (PM)



Total Vehicles (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Main St & Del Amo Blvd
City: Carson
Control: Signalized

Project ID: 18-05081-004
Date: 2/1/2018

Total

NS/EW Streets:	Main St				Main St				Del Amo Blvd				Del Amo Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	1	3	0	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	13	59	38	0	3	64	42	0	22	79	6	0	35	243	10	0	614
7:15 AM	17	83	43	0	7	104	30	0	19	89	8	0	55	277	11	0	743
7:30 AM	15	118	58	0	9	170	47	0	25	107	6	0	62	266	12	1	896
7:45 AM	15	136	82	0	11	158	46	0	32	164	14	0	70	214	17	0	959
8:00 AM	17	169	82	1	7	104	28	0	43	138	7	0	52	210	11	0	869
8:15 AM	25	126	87	0	12	83	22	0	19	170	7	0	46	228	9	0	834
8:30 AM	9	95	56	0	7	68	43	0	26	120	8	0	41	183	12	0	668
8:45 AM	11	92	43	1	8	71	29	0	26	104	9	0	26	159	12	0	591
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	122	878	489	2	64	822	287	0	212	971	65	0	387	1780	94	1	6174
APPROACH %'s :	8.18%	58.89%	32.80%	0.13%	5.46%	70.08%	24.47%	0.00%	16.99%	77.80%	5.21%	0.00%	17.11%	78.69%	4.16%	0.04%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	72	549	309	1	39	515	143	0	119	579	34	0	230	918	49	1	3558
PEAK HR FACTOR :	0.720	0.812	0.888	0.250	0.813	0.757	0.761	0.000	0.692	0.851	0.607	0.000	0.821	0.863	0.721	0.250	0.928
	0.865				0.771				0.871				0.878				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	1	3	0	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	6	103	95	0	19	131	40	0	52	234	21	0	63	154	12	0	930
4:15 PM	8	111	84	0	36	205	47	0	43	264	23	0	58	147	6	0	1032
4:30 PM	8	101	79	0	29	171	39	0	52	257	28	0	54	142	15	0	975
4:45 PM	5	115	78	0	29	158	36	0	40	266	24	0	45	153	15	0	964
5:00 PM	8	111	77	0	25	224	45	0	65	255	27	0	64	130	15	0	1046
5:15 PM	5	124	107	0	21	214	42	0	57	281	27	0	74	218	13	0	1183
5:30 PM	15	104	83	0	30	198	39	0	52	290	29	1	77	194	18	1	1131
5:45 PM	6	118	75	1	24	185	48	0	43	266	19	0	75	157	15	1	1033
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	61	887	678	1	213	1486	336	0	404	2113	198	1	510	1295	109	2	8294
APPROACH %'s :	3.75%	54.52%	41.67%	0.06%	10.47%	73.02%	16.51%	0.00%	14.87%	77.80%	7.29%	0.04%	26.62%	67.59%	5.69%	0.10%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	34	457	342	1	100	821	174	0	217	1092	102	1	290	699	61	2	4393
PEAK HR FACTOR :	0.567	0.921	0.799	0.250	0.833	0.916	0.906	0.000	0.835	0.941	0.879	0.250	0.942	0.802	0.847	0.500	0.928
	0.883				0.931				0.949				0.862				

Prepared by National Data & Surveying Services

Main St & Del Amo Blvd

Peak Hour Turning Movement Count

ID: 18-05081-004
City: Carson

Day: Thursday
Date: 02/01/2018

PEAK HOURS

AM	07:30 AM - 08:30 AM
NOON	NONE
PM	05:00 PM - 06:00 PM

COUNT PERIODS

AM	07:00 AM - 09:00 AM
NOON	NONE
PM	04:00 PM - 06:00 PM

Main St — SOUTHBOUND

AM	143	515	39	0	717	AM
NOON	0	0	0	0	0	NOON
PM	174	821	100	0	735	PM
	0	2	1	0		

Del Amo Blvd — EASTBOUND

AM	NOON	PM		
1133	0	908	⇦	
0	0	1	↶	0
119	0	217	↱	1
579	0	1092	→	3
34	0	102	↳	0
AM	NOON	PM		

CONTROL

Signalized

TEV	3558 AM	0 NOON	4393 PM
PHF	0.93		0.93

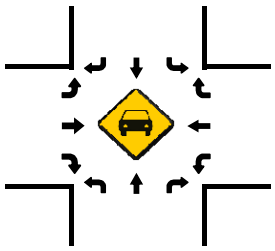
Del Amo Blvd — WESTBOUND

PM	NOON	AM		
61	0	49	↰	0
699	0	918	←	3
290	0	230	↰	1
2	0	1	↶	0
1536	0	928	⇨	
PM	NOON	AM		

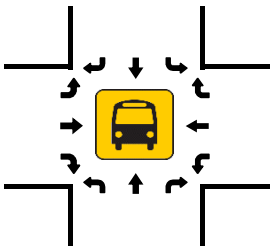
Main St — NORTHBOUND

PM	1214	1	34	457	342	PM
NOON	0	0	0	0	0	NOON
AM	780	1	72	549	309	AM
		0	1	2	0	

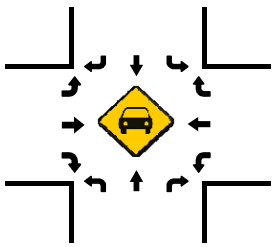
Total Vehicles (AM)



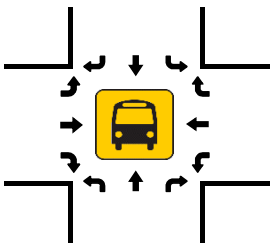
Total Vehicles (AM)



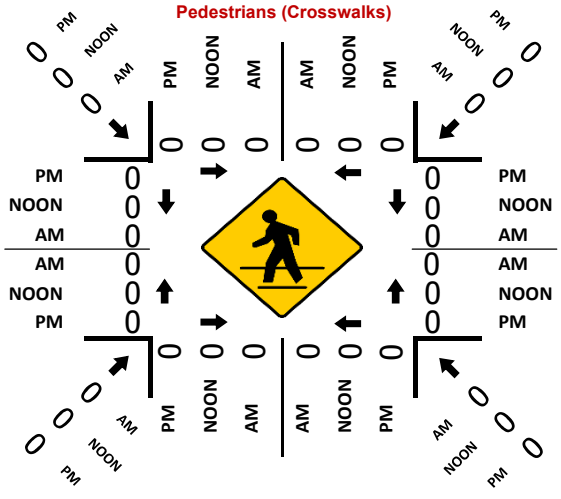
Total Vehicles (NOON)



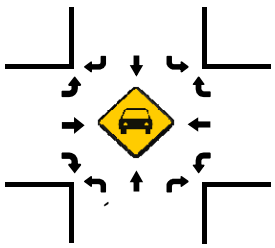
Total Vehicles (NOON)



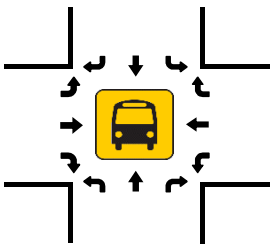
Pedestrians (Crosswalks)



Total Vehicles (PM)



Total Vehicles (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Main St & Torrance Blvd
City: Carson
Control: Signalized

Project ID: 18-05081-005
Date: 2/1/2018

Total

NS/EW Streets:	Main St				Main St				Torrance Blvd				Torrance Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	2	0	0	1	2	1	0	0.5	0.5	1	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	64	85	0	0	1	65	42	1	31	2	30	0	1	19	12	0	353
7:15 AM	71	99	0	0	2	131	53	1	28	3	36	0	0	16	4	0	444
7:30 AM	85	138	0	0	2	156	72	0	60	7	41	0	6	24	6	0	597
7:45 AM	76	173	1	0	3	187	61	1	61	1	58	1	4	10	14	0	651
8:00 AM	89	160	5	0	3	113	52	1	88	6	43	0	2	9	9	0	580
8:15 AM	59	139	1	0	1	82	46	2	68	4	39	0	1	11	3	0	456
8:30 AM	47	100	1	0	2	77	40	0	67	7	29	0	2	13	8	0	393
8:45 AM	58	92	1	1	1	63	48	0	46	5	34	0	2	10	4	0	365
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	549	986	9	1	15	874	414	6	449	35	310	1	18	112	60	0	3839
APPROACH %'s :	35.53%	63.82%	0.58%	0.06%	1.15%	66.77%	31.63%	0.46%	56.48%	4.40%	38.99%	0.13%	9.47%	58.95%	31.58%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	309	610	7	0	9	538	231	4	277	18	181	1	13	54	32	0	2284
PEAK HR FACTOR :	0.868	0.882	0.350	0.000	0.750	0.719	0.802	0.500	0.787	0.643	0.780	0.250	0.542	0.563	0.571	0.000	0.877
	0.911				0.776				0.870				0.688				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	2	0	0	1	2	1	0	0.5	0.5	1	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	48	101	0	1	6	145	65	2	81	11	118	0	0	9	5	0	592
4:15 PM	56	113	2	0	9	190	92	0	83	12	124	0	0	9	3	0	693
4:30 PM	50	100	3	0	11	194	62	0	106	12	105	0	1	10	2	0	656
4:45 PM	49	107	5	0	9	177	52	0	99	15	117	0	2	8	3	0	643
5:00 PM	43	111	4	0	7	222	78	0	86	9	134	0	2	7	5	0	708
5:15 PM	43	102	2	0	12	209	72	1	113	18	110	0	1	3	6	0	692
5:30 PM	51	109	2	0	8	209	93	1	98	17	116	0	1	4	7	0	716
5:45 PM	49	108	3	0	7	189	66	2	82	13	118	0	2	3	9	0	651
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	389	851	21	1	69	1535	580	6	748	107	942	0	9	53	40	0	5351
APPROACH %'s :	30.82%	67.43%	1.66%	0.08%	3.15%	70.09%	26.48%	0.27%	41.62%	5.95%	52.42%	0.00%	8.82%	51.96%	39.22%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	186	430	11	0	34	829	309	4	379	57	478	0	6	17	27	0	2767
PEAK HR FACTOR :	0.912	0.968	0.688	0.000	0.708	0.934	0.831	0.500	0.838	0.792	0.892	0.000	0.750	0.607	0.750	0.000	0.966
	0.968				0.945				0.948				0.893				

Prepared by National Data & Surveying Services

Main St & Torrance Blvd

Peak Hour Turning Movement Count

ID: 18-05081-005
City: Carson

Day: Thursday
Date: 02/01/2018

PEAK HOURS

AM: 07:30 AM - 08:30 AM
NOON: NONE
PM: 05:00 PM - 06:00 PM

COUNT PERIODS

AM: 07:00 AM - 09:00 AM
NOON: NONE
PM: 04:00 PM - 06:00 PM

Main St — SOUTHBOUND

AM	231	538	9	4	923	AM
NOON	0	0	0	0	0	NOON
PM	309	829	34	4	840	PM

Torrance Blvd — EASTBOUND

AM	NOON	PM		
595	0	512	⇦	
1	0	0	↶	0
277	0	379	↱	0.5
18	0	57	→	0.5
181	0	478	↴	1
AM	NOON	PM		

Torrance Blvd — WESTBOUND

PM	NOON	AM		
27	0	32	↰	0
17	0	54	←	1
6	0	13	↰	0
0	0	0	↰	0
102	0	34	⇨	
PM	NOON	AM		

CONTROL: Signalized

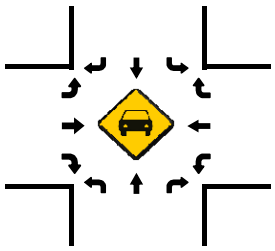
TEV	2284 AM	0 NOON	2767 PM
PHF	0.88		0.97

Main St — NORTHBOUND

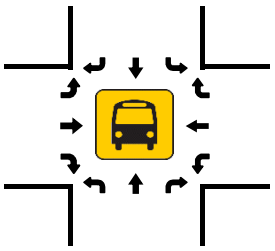
PM	1313	0	186	430	11	PM
NOON	0	0	0	0	0	NOON
AM	732	0	309	610	7	AM

1 2 1 0 — 0 2 2 0

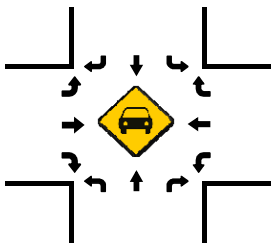
Total Vehicles (AM)



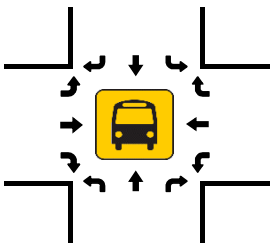
Total Vehicles (AM)



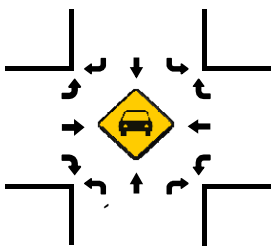
Total Vehicles (NOON)



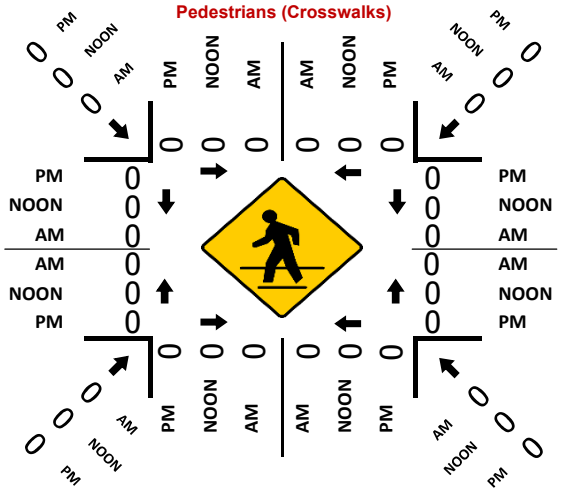
Total Vehicles (NOON)



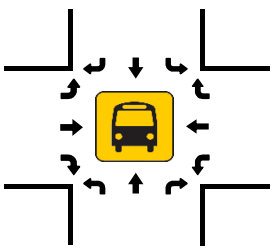
Total Vehicles (PM)



Pedestrians (Crosswalks)



Total Vehicles (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Avalon Blvd & Artesia Blvd/SR 91 WB On Ramp
City: Carson
Control: Signalized

Project ID: 18-05081-006
Date: 2/1/2018

Total

NS/EW Streets:	Avalon Blvd				Avalon Blvd				Artesia Blvd/SR 91 WB On Ramp				Artesia Blvd/SR 91 WB On Ramp				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	3	1	0	2	3	0	0	0	0	0	0	1.5	0	1.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	160	27	0	24	152	0	0	0	0	0	0	92	0	146	0	601
7:15 AM	0	184	33	0	48	219	0	0	0	0	0	0	73	0	117	0	674
7:30 AM	0	196	39	0	47	264	0	0	0	0	0	0	95	0	170	0	811
7:45 AM	0	312	43	0	40	302	0	0	0	0	0	0	82	0	177	0	956
8:00 AM	0	220	45	0	42	303	0	0	0	0	0	0	84	0	136	0	830
8:15 AM	0	206	50	0	28	194	0	0	0	0	0	0	71	0	113	1	663
8:30 AM	0	201	51	0	36	208	0	0	0	0	0	0	78	0	117	0	691
8:45 AM	0	165	35	0	26	174	0	0	0	0	0	0	77	0	139	2	618
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1644	323	0	291	1816	0	0	0	0	0	0	652	0	1115	3	5844
APPROACH %'s :	0.00%	83.58%	16.42%	0.00%	13.81%	86.19%	0.00%	0.00%					36.84%	0.00%	62.99%	0.17%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	912	160	0	177	1088	0	0	0	0	0	0	334	0	600	0	3271
PEAK HR FACTOR :	0.000	0.731	0.889	0.000	0.922	0.898	0.000	0.000	0.000	0.000	0.000	0.000	0.879	0.000	0.847	0.000	0.855
		0.755				0.917								0.881			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	3	1	0	2	3	0	0	0	0	0	0	1.5	0	1.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	296	84	1	48	279	0	0	0	0	0	0	62	0	95	0	865
4:15 PM	0	241	46	0	45	240	0	0	0	0	0	0	88	0	163	2	825
4:30 PM	0	236	36	0	42	276	0	0	0	0	0	0	89	0	101	0	780
4:45 PM	0	289	50	1	38	227	0	0	0	0	0	0	81	0	125	1	812
5:00 PM	0	267	58	0	51	315	0	0	0	0	0	0	72	0	112	0	875
5:15 PM	0	324	54	0	40	273	0	0	0	0	0	0	112	0	114	3	920
5:30 PM	0	299	55	0	34	243	0	0	0	0	0	0	85	0	98	0	814
5:45 PM	0	248	31	0	36	230	0	0	0	0	0	0	74	0	83	0	702
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	2200	414	2	334	2083	0	0	0	0	0	0	663	0	891	6	6593
APPROACH %'s :	0.00%	84.10%	15.83%	0.08%	13.82%	86.18%	0.00%	0.00%					42.50%	0.00%	57.12%	0.38%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	1179	217	1	163	1058	0	0	0	0	0	0	350	0	449	4	3421
PEAK HR FACTOR :	0.000	0.910	0.935	0.250	0.799	0.840	0.000	0.000	0.000	0.000	0.000	0.000	0.781	0.000	0.898	0.333	0.930
		0.924				0.834								0.877			

Prepared by National Data & Surveying Services

Avalon Blvd & Artesia Blvd/SR 91 WB On Ramp

Peak Hour Turning Movement Count

ID: 18-05081-006
City: Carson

Day: Thursday
Date: 02/01/2018

PEAK HOURS

AM: 07:15 AM - 08:15 AM
NOON: NONE
PM: 04:45 PM - 05:45 PM

COUNT PERIODS

AM: 07:00 AM - 09:00 AM
NOON: NONE
PM: 04:00 PM - 06:00 PM

SOUTHBOUND — Avalon Blvd

AM	0	1088	177	0	1512	AM
NOON	0	0	0	0	0	NOON
PM	0	1058	163	0	1628	PM

EASTBOUND — Artesia Blvd/SR 91 WB On Ramp

AM	NOON	PM		
0	0	0		
0	0	0		0
0	0	0		0
0	0	0		0
0	0	0		0
AM	NOON	PM		

WESTBOUND — Artesia Blvd/SR 91 WB On Ramp

PM	NOON	AM		
449	0	600		1.5
0	0	0		0
350	0	334		1.5
4	0	0		0
384	0	337		
PM	NOON	AM		

NORTHBOUND — Avalon Blvd

PM	1409	1	0	1179	217	PM
NOON	0	0	0	0	0	NOON
AM	1422	0	0	912	160	AM

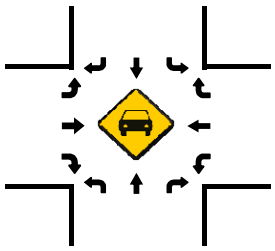
	0	3	2	0
	0	0	3	1

CONTROL

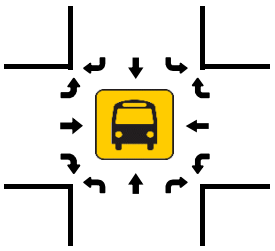
Signalized

TEV	3271 AM	0 NOON	3421 PM
PHF	0.86		0.93

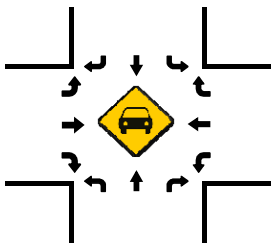
Total Vehicles (AM)



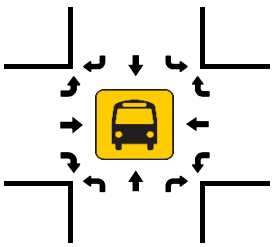
Total Vehicles (AM)



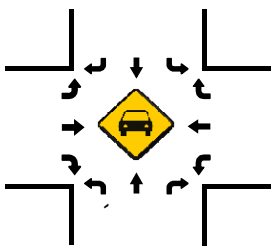
Total Vehicles (NOON)



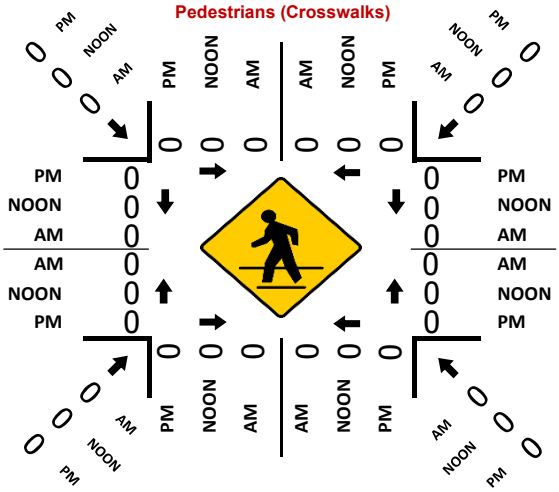
Total Vehicles (NOON)



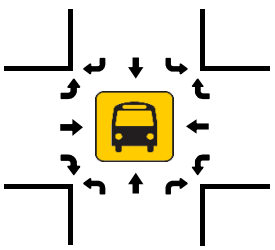
Total Vehicles (PM)



Pedestrians (Crosswalks)



Total Vehicles (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Avalon Blvd & Albertoni St
City: Carson
Control: Signalized

Project ID: 18-05081-007
Date: 2/1/2018

Total

NS/EW Streets:	Avalon Blvd				Avalon Blvd				Albertoni St				Albertoni St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	3	1	0	1	3	0	0	1	1.5	1.5	0	1	1.5	1.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	44	119	37	1	67	88	74	4	19	24	23	0	8	2	47	2	559
7:15 AM	51	143	39	1	65	130	84	2	28	22	36	0	12	4	42	1	660
7:30 AM	40	167	40	1	77	150	109	5	37	26	45	0	17	5	39	1	759
7:45 AM	41	214	38	0	67	188	101	11	64	25	78	0	20	5	83	0	935
8:00 AM	53	166	32	1	90	192	96	6	44	42	96	0	20	7	63	1	909
8:15 AM	43	168	40	2	77	126	70	6	36	34	92	0	20	3	50	1	768
8:30 AM	47	155	40	0	70	120	79	7	40	27	77	1	12	2	54	1	732
8:45 AM	27	133	41	3	57	98	77	1	41	32	64	0	15	5	42	0	636
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	346	1265	307	9	570	1092	690	42	309	232	511	1	124	33	420	7	5958
APPROACH %'s :	17.96%	65.65%	15.93%	0.47%	23.81%	45.61%	28.82%	1.75%	29.34%	22.03%	48.53%	0.09%	21.23%	5.65%	71.92%	1.20%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	177	715	150	4	311	656	376	28	181	127	311	0	77	20	235	3	3371
PEAK HR FACTOR :	0.835	0.835	0.938	0.500	0.864	0.854	0.862	0.636	0.707	0.756	0.810	0.000	0.963	0.714	0.708	0.750	0.901
	0.892				0.893				0.850				0.775				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	3	1	0	1	3	0	0	1	1.5	1.5	0	1	1.5	1.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	57	220	43	5	73	183	61	5	64	163	121	0	27	8	65	5	1100
4:15 PM	50	207	40	3	58	201	57	2	54	166	129	0	23	6	40	6	1042
4:30 PM	46	148	41	0	67	221	50	2	65	185	140	0	26	10	52	3	1056
4:45 PM	57	209	37	3	47	202	65	4	68	193	157	0	19	3	54	7	1125
5:00 PM	53	208	31	3	70	205	70	4	71	201	142	0	28	7	47	6	1146
5:15 PM	68	240	38	1	64	244	57	3	77	203	131	0	22	5	48	2	1203
5:30 PM	58	240	41	0	61	240	71	8	71	190	156	0	12	6	40	7	1201
5:45 PM	50	162	38	2	63	182	38	5	59	189	126	0	27	13	58	3	1015
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	439	1634	309	17	503	1678	469	33	529	1490	1102	0	184	58	404	39	8888
APPROACH %'s :	18.30%	68.11%	12.88%	0.71%	18.75%	62.54%	17.48%	1.23%	16.95%	47.74%	35.31%	0.00%	26.86%	8.47%	58.98%	5.69%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	236	897	147	7	242	891	263	19	287	787	586	0	81	21	189	22	4675
PEAK HR FACTOR :	0.868	0.934	0.896	0.583	0.864	0.913	0.926	0.594	0.932	0.969	0.933	0.000	0.723	0.750	0.875	0.786	0.972
	0.927				0.931				0.993				0.889				

Prepared by National Data & Surveying Services

Avalon Blvd & Albertoni St

Peak Hour Turning Movement Count

ID: 18-05081-007
City: Carson

Day: Thursday
Date: 02/01/2018

PEAK HOURS

AM: 07:30 AM - 08:30 AM
NOON: NONE
PM: 04:45 PM - 05:45 PM

COUNT PERIODS

AM: 07:00 AM - 09:00 AM
NOON: NONE
PM: 04:00 PM - 06:00 PM

SOUTHBOUND (Avalon Blvd)

AM	376	656	311	28	1159	AM
NOON	0	0	0	0	0	NOON
PM	263	891	242	19	1392	PM
	0	3	1	0		

EASTBOUND (Albertoni St)

AM	NOON	PM		
573	0	520		
0	0	0	0	
181	0	287	1	
127	0	787	1.5	
311	0	586	1.5	

WESTBOUND (Albertoni St)

PM	NOON	AM	
189	0	235	1.5
21	0	20	1.5
81	0	77	1
22	0	3	0
1198	0	591	

CONTROL

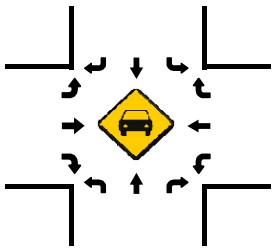
Signalized

TEV	3371 AM	0 NOON	4675 PM
PHF	0.90		0.97

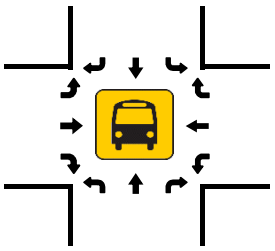
NORTHBOUND (Avalon Blvd)

PM	1565	7	236	897	147	PM
NOON	0	0	0	0	0	NOON
AM	1048	4	177	715	150	AM
		0	1	3	1	

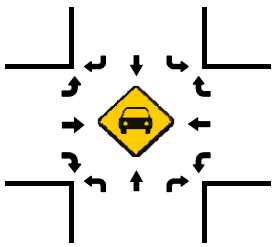
Total Vehicles (AM)



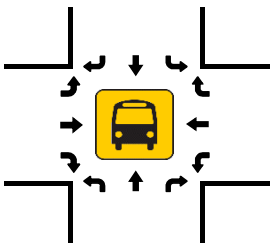
Total Vehicles (AM)



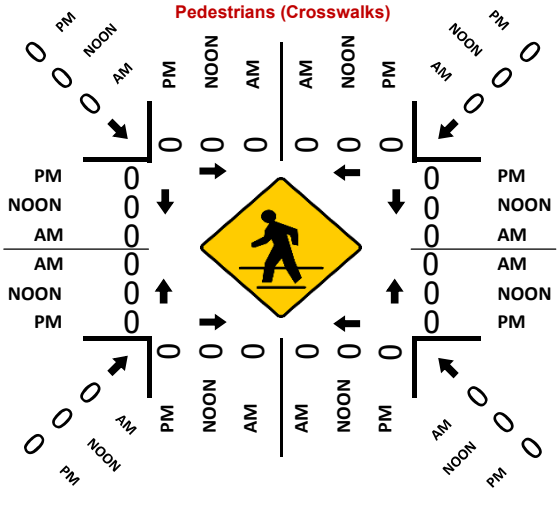
Total Vehicles (NOON)



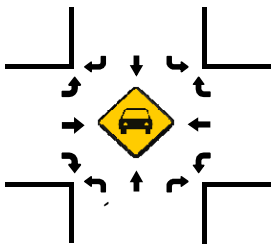
Total Vehicles (NOON)



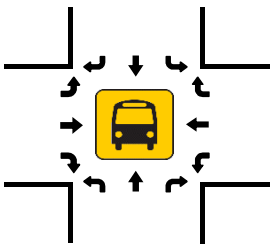
Pedestrians (Crosswalks)



Total Vehicles (PM)



Total Vehicles (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Avalon Blvd & Victoria St
City: Carson
Control: Signalized

Project ID: 18-05081-008
Date: 2/1/2018

Total

NS/EW Streets:	Avalon Blvd				Avalon Blvd				Victoria St				Victoria St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	3	1	0	2	3	0	0	1	2	1	0	1	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	16	123	15	3	21	74	29	1	20	46	4	0	8	111	39	0	510
7:15 AM	23	148	24	2	30	122	18	3	31	49	17	0	17	125	41	0	650
7:30 AM	34	136	28	0	45	164	27	3	21	87	23	0	23	147	55	0	793
7:45 AM	36	211	36	2	82	200	17	2	20	111	27	0	20	88	64	0	916
8:00 AM	33	163	71	3	112	172	13	3	21	150	15	0	23	90	52	0	921
8:15 AM	27	175	66	1	130	149	21	2	23	149	16	0	31	91	50	0	931
8:30 AM	21	141	42	1	74	116	23	7	19	81	20	0	31	98	63	0	737
8:45 AM	24	129	34	3	58	115	19	2	23	93	17	0	26	82	38	0	663
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	214	1226	316	15	552	1112	167	23	178	766	139	0	179	832	402	0	6121
APPROACH %'s :	12.08%	69.23%	17.84%	0.85%	29.77%	59.98%	9.01%	1.24%	16.44%	70.73%	12.83%	0.00%	12.67%	58.88%	28.45%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	130	685	201	6	369	685	78	10	85	497	81	0	97	416	221	0	3561
PEAK HR FACTOR :	0.903	0.812	0.708	0.500	0.710	0.856	0.722	0.833	0.924	0.828	0.750	0.000	0.782	0.707	0.863	0.000	0.956
	0.896				0.945				0.882				0.816				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	3	1	0	2	3	0	0	1	2	1	0	1	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	30	183	41	5	75	215	21	2	27	115	45	0	60	165	94	0	1078
4:15 PM	21	205	57	4	83	260	20	8	35	113	35	0	41	88	54	0	1024
4:30 PM	32	160	56	8	85	221	14	5	24	128	41	0	35	128	52	0	989
4:45 PM	28	226	64	3	110	285	22	5	18	135	23	0	32	89	64	0	1104
5:00 PM	29	183	51	10	103	189	16	4	31	189	37	0	53	185	83	0	1163
5:15 PM	30	230	65	7	111	276	20	7	32	159	49	0	47	213	116	0	1362
5:30 PM	34	189	47	8	85	230	27	2	33	154	33	0	54	198	90	0	1184
5:45 PM	32	189	70	3	84	270	17	3	22	131	45	0	43	120	46	0	1075
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	236	1565	451	48	736	1946	157	36	222	1124	308	0	365	1186	599	0	8979
APPROACH %'s :	10.26%	68.04%	19.61%	2.09%	25.60%	67.69%	5.46%	1.25%	13.42%	67.96%	18.62%	0.00%	16.98%	55.16%	27.86%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	121	828	227	28	409	980	85	18	114	637	142	0	186	685	353	0	4813
PEAK HR FACTOR :	0.890	0.900	0.873	0.700	0.921	0.860	0.787	0.643	0.864	0.843	0.724	0.000	0.861	0.804	0.761	0.000	0.883
	0.907				0.884				0.869				0.814				

Prepared by National Data & Surveying Services

Avalon Blvd & Victoria St

Peak Hour Turning Movement Count

ID: 18-05081-008
City: Carson

Day: Thursday
Date: 02/01/2018

PEAK HOURS

AM: 07:30 AM - 08:30 AM
NOON: NONE
PM: 04:45 PM - 05:45 PM

COUNT PERIODS

AM: 07:00 AM - 09:00 AM
NOON: NONE
PM: 04:00 PM - 06:00 PM

SOUTHBOUND (Avalon Blvd)

AM	78	685	369	10	1001	AM
NOON	0	0	0	0	0	NOON
PM	85	980	409	18	1313	PM
	0	3	2	0		

EASTBOUND (Victoria St)

AM	NOON	PM	
624	0	891	
0	0	0	0
85	0	114	1
497	0	637	2
81	0	142	1
AM	NOON	PM	

WESTBOUND (Victoria St)

PM	NOON	AM	
353	0	221	1
685	0	416	2
186	0	97	1
0	0	0	0
1273	0	1067	
PM	NOON	AM	

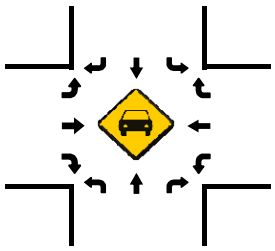
CONTROL: Signalized

TEV	3561 AM	0 NOON	4813 PM
PHF	0.96		0.88

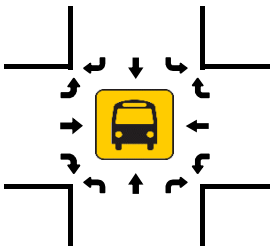
NORTHBOUND (Avalon Blvd)

PM	1336	28	121	828	227	PM
NOON	0	0	0	0	0	NOON
AM	869	6	130	685	201	AM
		0	1	3	1	

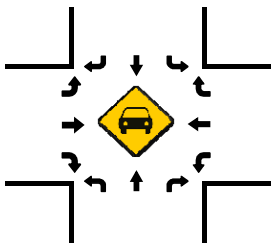
Total Vehicles (AM)



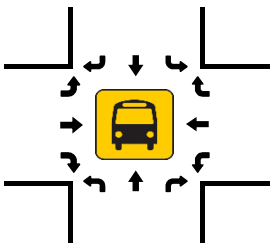
Total Vehicles (AM)



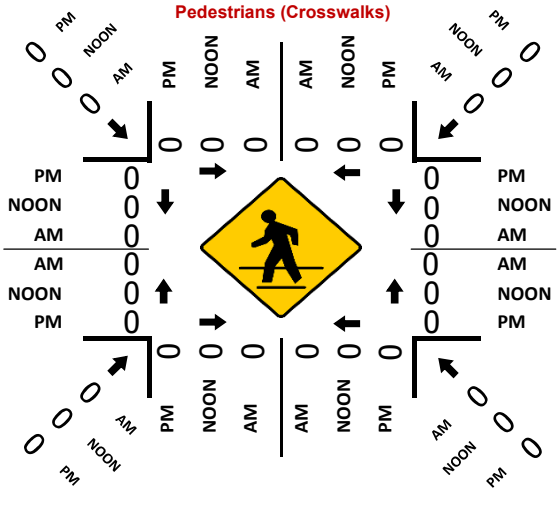
Total Vehicles (NOON)



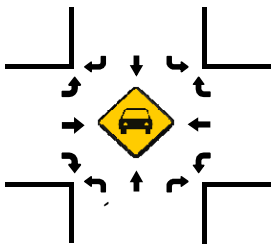
Total Vehicles (NOON)



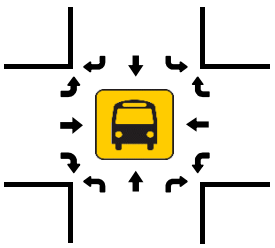
Pedestrians (Crosswalks)



Total Vehicles (PM)



Total Vehicles (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Avalon Blvd & 184th St/StubHub Center Gate
City: Carson
Control: Signalized

Project ID: 18-05081-009
Date: 2/1/2018

Total

NS/EW Streets:	Avalon Blvd				Avalon Blvd				184th St/StubHub Center Gate				184th St/StubHub Center Gate				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	3	1	0	1	3	0	0	0.5	0	0.5	0	1.5	0	1.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	2	167	5	1	6	99	0	0	9	0	6	0	1	0	2	0	298
7:15 AM	2	192	9	0	7	147	1	0	11	0	6	0	0	0	1	0	376
7:30 AM	7	207	11	0	9	229	2	0	11	0	18	0	0	0	2	0	496
7:45 AM	0	255	20	0	13	225	1	0	11	0	13	0	1	0	0	0	539
8:00 AM	4	276	19	2	7	202	2	0	16	0	6	0	3	0	6	0	543
8:15 AM	5	229	12	1	8	174	3	0	19	0	8	0	4	0	3	0	466
8:30 AM	4	193	23	0	17	162	2	1	6	0	5	0	2	0	7	0	422
8:45 AM	3	185	24	2	16	117	2	0	9	0	5	0	1	0	2	0	366
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	27	1704	123	6	83	1355	13	1	92	0	67	0	12	0	23	0	3506
APPROACH %'s :	1.45%	91.61%	6.61%	0.32%	5.72%	93.32%	0.90%	0.07%	57.86%	0.00%	42.14%	0.00%	34.29%	0.00%	65.71%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	16	967	62	3	37	830	8	0	57	0	45	0	8	0	11	0	2044
PEAK HR FACTOR :	0.571	0.876	0.775	0.375	0.712	0.906	0.667	0.000	0.750	0.000	0.625	0.000	0.500	0.000	0.458	0.000	0.941
		0.870				0.911				0.879				0.528			

	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
PM	1	3	1	0	1	3	0	0	0.5	0	0.5	0	1.5	0	1.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	8	282	15	3	29	277	10	1	12	0	8	0	17	0	17	0	679
4:15 PM	5	236	16	2	32	288	4	2	16	0	8	0	19	0	14	0	642
4:30 PM	6	266	8	3	8	319	15	0	14	0	12	0	22	0	14	0	687
4:45 PM	10	244	6	2	11	294	5	0	20	0	6	0	10	0	9	0	617
5:00 PM	9	263	7	3	3	277	11	0	17	0	4	0	15	0	16	0	625
5:15 PM	4	276	9	1	12	334	5	0	21	0	6	0	14	0	13	0	695
5:30 PM	4	257	10	0	15	274	7	2	19	0	13	0	12	0	9	0	622
5:45 PM	11	284	13	2	23	342	10	0	16	0	7	0	9	0	10	0	727
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	57	2108	84	16	133	2405	67	5	135	0	64	0	118	0	102	0	5294
APPROACH %'s :	2.52%	93.07%	3.71%	0.71%	5.10%	92.15%	2.57%	0.19%	67.84%	0.00%	32.16%	0.00%	53.64%	0.00%	46.36%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	28	1080	39	6	53	1227	33	2	73	0	30	0	50	0	48	0	2669
PEAK HR FACTOR :	0.636	0.951	0.750	0.500	0.576	0.897	0.750	0.250	0.869	0.000	0.577	0.000	0.833	0.000	0.750	0.000	0.918
		0.930				0.877				0.805				0.790			

Prepared by National Data & Surveying Services

Avalon Blvd & 184th St/StubHub Center Gate

Peak Hour Turning Movement Count

ID: 18-05081-009
City: Carson

Day: Thursday
Date: 02/01/2018

PEAK HOURS		COUNT PERIODS
07:30 AM - 08:30 AM	AM	07:00 AM - 09:00 AM
NONE	NOON	NONE
05:00 PM - 06:00 PM	PM	04:00 PM - 06:00 PM

Avalon Blvd — SOUTHBOUND

AM	8	830	37	0	1035	AM
NOON	0	0	0	0	0	NOON
PM	33	1227	53	2	1203	PM
	0	3	1	0		

184th St/StubHub Center Gate — EASTBOUND

AM	NOON	PM	
24	0	61	
0	0	0	0
57	0	73	0.5
0	0	0	0
45	0	30	0.5
AM	NOON	PM	

184th St/StubHub Center Gate — WESTBOUND

	PM	NOON	AM
1.5	48	0	11
0	0	0	0
1.5	50	0	8
0	0	0	0
	92	0	99
	PM	NOON	AM

CONTROL

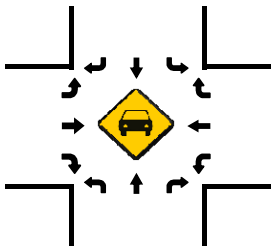
Signalized

	AM	NOON	PM
TEV	2044	0	2669
PHF	0.94		0.92

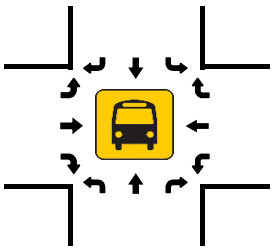
Avalon Blvd — NORTHBOUND

	0	1	3	1		
PM	1313	6	28	1080	39	PM
NOON	0	0	0	0	0	NOON
AM	886	3	16	967	62	AM

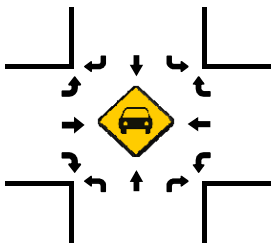
Total Vehicles (AM)



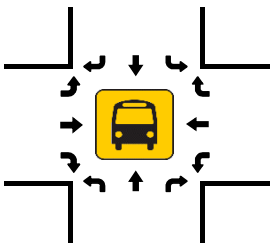
Total Vehicles (AM)



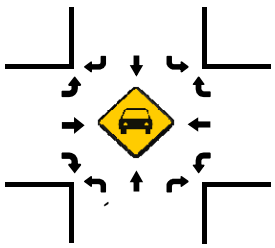
Total Vehicles (NOON)



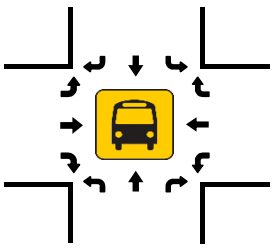
Total Vehicles (NOON)



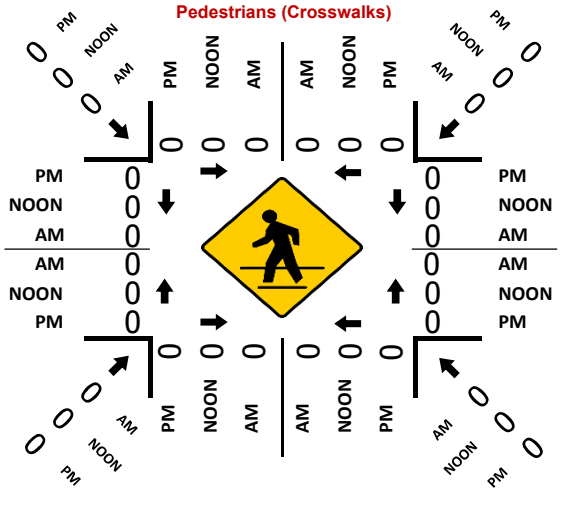
Total Vehicles (PM)



Total Vehicles (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services Intersection Turning Movement Count

Location: Avalon Blvd & University Dr
City: Carson
Control: Signalized

Project ID: 18-05081-010
Date: 2/1/2018

Total

NS/EW Streets:	Avalon Blvd				Avalon Blvd				University Dr				University Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	3	1	0	2	3	0	0	0	0	0	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	117	25	0	11	114	0	1	0	0	0	0	35	0	54	1	358
7:15 AM	0	128	54	0	32	111	0	4	0	0	0	0	40	0	70	0	439
7:30 AM	0	142	59	0	47	208	0	3	0	0	0	0	42	0	78	0	579
7:45 AM	0	210	94	0	83	184	0	4	0	0	0	0	48	0	84	0	707
8:00 AM	0	251	105	0	71	164	0	14	0	0	0	0	49	0	78	0	732
8:15 AM	0	188	134	0	52	134	0	15	0	0	0	0	68	0	55	0	646
8:30 AM	0	180	143	0	41	112	0	9	0	0	0	0	82	0	54	0	621
8:45 AM	0	167	78	0	33	99	0	12	0	0	0	0	57	0	44	0	490
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1383	692	0	370	1126	0	62	0	0	0	0	421	0	517	1	4572
APPROACH %'s :	0.00%	66.65%	33.35%	0.00%	23.75%	72.27%	0.00%	3.98%					44.83%	0.00%	55.06%	0.11%	
PEAK HR :	**07:45 AM - 08:45 AM**																TOTAL
PEAK HR VOL :	0	829	476	0	247	594	0	42	0	0	0	0	247	0	271	0	2706
PEAK HR FACTOR :	0.000	0.826	0.832	0.000	0.744	0.807	0.000	0.700	0.000	0.000	0.000	0.000	0.753	0.000	0.807	0.000	0.924
		0.916				0.815								0.952			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	3	1	0	2	3	0	0	0	0	0	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	237	63	0	48	243	0	29	0	0	0	0	152	0	56	0	828
4:15 PM	0	237	94	0	65	237	0	24	0	0	0	0	89	0	40	0	786
4:30 PM	0	211	80	0	62	256	0	27	0	0	0	0	84	0	52	0	772
4:45 PM	0	238	95	0	61	241	0	20	0	0	0	0	76	0	47	0	778
5:00 PM	0	236	88	0	58	231	0	21	0	0	0	0	101	0	51	0	786
5:15 PM	0	241	101	0	66	281	0	28	0	0	0	0	136	0	60	0	913
5:30 PM	0	241	79	0	62	243	0	22	0	0	0	0	131	0	63	0	841
5:45 PM	0	243	62	0	76	278	0	18	0	0	0	0	103	0	59	0	839
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1884	662	0	498	2010	0	189	0	0	0	0	872	0	428	0	6543
APPROACH %'s :	0.00%	74.00%	26.00%	0.00%	18.46%	74.53%	0.00%	7.01%					67.08%	0.00%	32.92%	0.00%	
PEAK HR :	**05:00 PM - 06:00 PM**																TOTAL
PEAK HR VOL :	0	961	330	0	262	1033	0	89	0	0	0	0	471	0	233	0	3379
PEAK HR FACTOR :	0.000	0.989	0.817	0.000	0.862	0.919	0.000	0.795	0.000	0.000	0.000	0.000	0.866	0.000	0.925	0.000	0.925
		0.944				0.923								0.898			

Prepared by National Data & Surveying Services

Avalon Blvd & University Dr

Peak Hour Turning Movement Count

ID: 18-05081-010
City: Carson

Day: Thursday
Date: 02/01/2018

PEAK HOURS

AM: 07:45 AM - 08:45 AM
NOON: NONE
PM: 05:00 PM - 06:00 PM

COUNT PERIODS

AM: 07:00 AM - 09:00 AM
NOON: NONE
PM: 04:00 PM - 06:00 PM

Avalon Blvd — SOUTHBOUND

AM	0	594	247	42	1142	AM
NOON	0	0	0	0	0	NOON
PM	0	1033	262	89	1283	PM

University Dr — EASTBOUND

AM	NOON	PM	
0	0	0	
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
AM	NOON	PM	

WESTBOUND — University Dr

PM	NOON	AM	
233	0	271	1
0	0	0	0
471	0	247	1
0	0	0	0
592	0	723	
PM	NOON	AM	

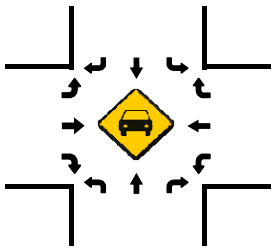
CONTROL: Signalized

TEV	2706	0	3379
	AM	NOON	PM
PHF	0.92		0.93

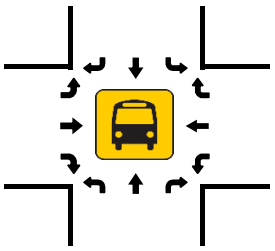
Avalon Blvd — NORTHBOUND

PM	1504	0	0	961	330	PM
NOON	0	0	0	0	0	NOON
AM	841	0	0	829	476	AM

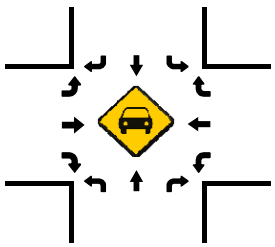
Total Vehicles (AM)



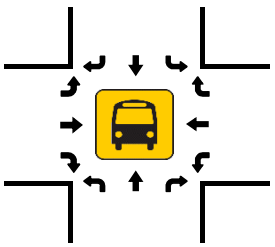
Total Vehicles (AM)



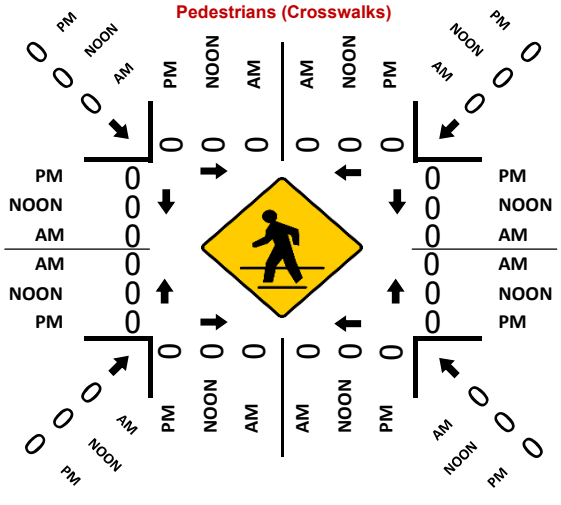
Total Vehicles (NOON)



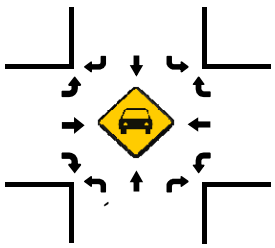
Total Vehicles (NOON)



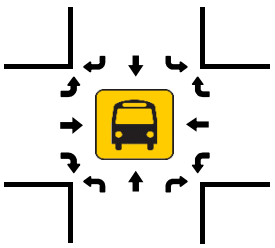
Pedestrians (Crosswalks)



Total Vehicles (PM)



Total Vehicles (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Avalon Blvd & 192nd St
City: Carson
Control: Signalized

Project ID: 18-05081-011
Date: 2/1/2018

Total

NS/EW Streets:	Avalon Blvd				Avalon Blvd				192nd St				192nd St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	3	0	0	0	3	0	0	1	0	1	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	16	133	0	0	0	119	13	0	7	0	6	0	0	0	0	0	294
7:15 AM	17	183	0	0	0	143	25	0	16	0	14	0	0	0	0	0	398
7:30 AM	21	179	0	0	0	210	25	0	15	0	17	0	0	0	0	0	467
7:45 AM	39	275	0	1	0	201	29	0	31	0	21	0	0	0	0	0	597
8:00 AM	41	324	0	2	0	173	31	0	23	0	14	0	0	0	0	0	608
8:15 AM	20	300	0	0	0	180	21	0	22	0	9	0	0	0	0	0	552
8:30 AM	13	305	0	1	0	173	19	0	31	0	11	0	0	0	0	0	553
8:45 AM	21	198	0	0	0	151	16	0	19	0	10	0	0	0	0	0	415
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	188	1897	0	4	0	1350	179	0	164	0	102	0	0	0	0	0	3884
APPROACH %'s :	9.00%	90.81%	0.00%	0.19%	0.00%	88.29%	11.71%	0.00%	61.65%	0.00%	38.35%	0.00%					
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	113	1204	0	4	0	727	100	0	107	0	55	0	0	0	0	0	2310
PEAK HR FACTOR :	0.689	0.929	0.000	0.500	0.000	0.904	0.806	0.000	0.863	0.000	0.655	0.000	0.000	0.000	0.000	0.000	0.950
	0.900				0.899				0.779								

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	3	0	0	0	3	0	0	1	0	1	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	17	278	0	0	0	368	14	0	27	0	33	0	0	0	0	0	737
4:15 PM	25	265	0	1	0	300	21	0	46	0	38	0	0	0	0	0	696
4:30 PM	17	250	0	0	0	328	24	0	44	0	38	0	0	0	0	0	701
4:45 PM	12	302	0	0	0	295	13	0	41	0	47	0	0	0	0	0	710
5:00 PM	21	247	0	1	0	300	26	0	55	0	40	0	0	0	0	0	690
5:15 PM	14	307	0	0	0	397	21	0	45	0	45	0	0	0	0	0	829
5:30 PM	29	274	0	0	0	355	18	0	54	0	41	0	0	0	0	0	771
5:45 PM	21	250	0	2	0	366	19	0	44	0	42	0	0	0	0	0	744
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	156	2173	0	4	0	2709	156	0	356	0	324	0	0	0	0	0	5878
APPROACH %'s :	6.69%	93.14%	0.00%	0.17%	0.00%	94.55%	5.45%	0.00%	52.35%	0.00%	47.65%	0.00%					
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	85	1078	0	3	0	1418	84	0	198	0	168	0	0	0	0	0	3034
PEAK HR FACTOR :	0.733	0.878	0.000	0.375	0.000	0.893	0.808	0.000	0.900	0.000	0.933	0.000	0.000	0.000	0.000	0.000	0.915
	0.908				0.898				0.963								

Prepared by National Data & Surveying Services

Avalon Blvd & 192nd St

Peak Hour Turning Movement Count

ID: 18-05081-011
City: Carson

Day: Thursday
Date: 02/01/2018

PEAK HOURS

AM	07:45 AM - 08:45 AM
NOON	NONE
PM	05:00 PM - 06:00 PM

COUNT PERIODS

AM	07:00 AM - 09:00 AM
NOON	NONE
PM	04:00 PM - 06:00 PM

Avalon Blvd

SOUTHBOUND

AM	100	727	0	0	1311	AM
NOON	0	0	0	0	0	NOON
PM	84	1418	0	0	1276	PM

0 3 0 0

EASTBOUND (192nd St)

AM	NOON	PM	
213	0	169	
0	0	0	0
107	0	198	1
0	0	0	0
55	0	168	1

AM NOON PM

CONTROL

Signalized

TEV	2310 AM	0 NOON	3034 PM
PHF	0.95		0.91

WESTBOUND (192nd St)

PM	NOON	AM	
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	

PM NOON AM

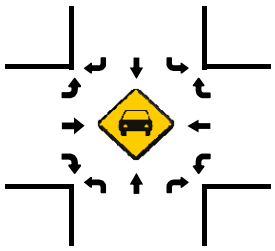
0 1 3 0

NORTHBOUND

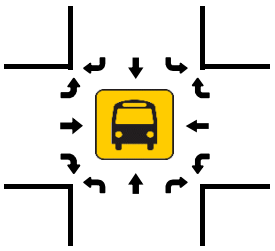
PM	1589	3	85	1078	0	PM
NOON	0	0	0	0	0	NOON
AM	786	4	113	1204	0	AM

Avalon Blvd

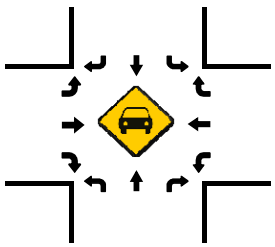
Total Vehicles (AM)



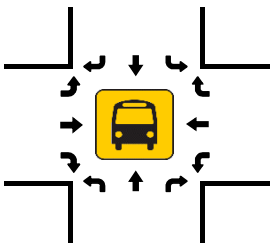
Total Vehicles (AM)



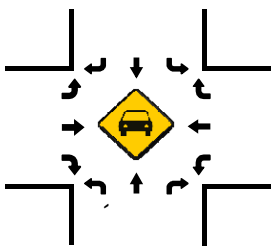
Total Vehicles (NOON)



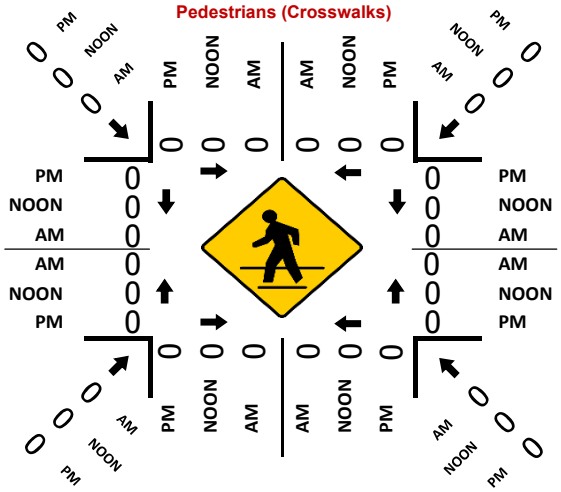
Total Vehicles (NOON)



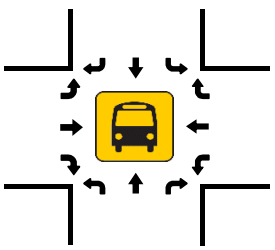
Total Vehicles (PM)



Pedestrians (Crosswalks)



Total Vehicles (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Avalon Blvd & Elsmere Dr
City: Carson
Control: Signalized

Project ID: 18-05081-012
Date: 2/1/2018

Total

NS/EW Streets:	Avalon Blvd				Avalon Blvd				Elsmere Dr				Elsmere Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	3	0	0	1	3	0	0	0	0	0	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	134	5	0	6	125	0	0	0	0	0	0	10	0	13	0	293
7:15 AM	0	173	5	0	5	142	0	0	0	0	0	0	15	0	16	0	356
7:30 AM	0	190	7	0	7	222	0	0	0	0	0	0	20	0	7	0	453
7:45 AM	0	304	27	0	17	207	0	1	0	0	0	0	30	0	12	0	598
8:00 AM	0	343	17	0	11	185	0	0	0	0	0	0	38	0	14	0	608
8:15 AM	0	327	13	0	4	189	0	0	0	0	0	0	14	0	7	0	554
8:30 AM	0	294	6	0	1	174	0	0	0	0	0	0	14	0	7	0	496
8:45 AM	0	235	6	0	2	174	0	1	0	0	0	0	14	0	7	0	439
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	2000	86	0	53	1418	0	2	0	0	0	0	155	0	83	0	3797
APPROACH %'s :	0.00%	95.88%	4.12%	0.00%	3.60%	96.27%	0.00%	0.14%					65.13%	0.00%	34.87%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	1268	63	0	33	755	0	1	0	0	0	0	96	0	40	0	2256
PEAK HR FACTOR :	0.000	0.924	0.583	0.000	0.485	0.912	0.000	0.250	0.000	0.000	0.000	0.000	0.632	0.000	0.714	0.000	0.928
		0.924				0.877								0.654			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	3	0	0	1	3	0	0	0	0	0	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	281	7	0	17	429	0	1	0	0	0	0	9	0	6	0	750
4:15 PM	0	307	9	0	10	328	0	0	0	0	0	0	6	0	4	0	664
4:30 PM	0	262	19	1	12	330	0	1	0	0	0	0	11	0	5	0	641
4:45 PM	0	296	11	0	16	339	0	1	0	0	0	0	9	0	5	0	677
5:00 PM	0	285	19	0	16	322	0	0	0	0	0	0	4	0	8	0	654
5:15 PM	0	299	17	0	9	428	0	1	0	0	0	0	7	0	8	0	769
5:30 PM	0	283	14	0	12	391	0	1	0	0	0	0	8	0	10	0	719
5:45 PM	0	275	15	0	20	385	0	0	0	0	0	0	9	0	9	0	713
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	2288	111	1	112	2952	0	5	0	0	0	0	63	0	55	0	5587
APPROACH %'s :	0.00%	95.33%	4.63%	0.04%	3.65%	96.19%	0.00%	0.16%					53.39%	0.00%	46.61%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	1142	65	0	57	1526	0	2	0	0	0	0	28	0	35	0	2855
PEAK HR FACTOR :	0.000	0.955	0.855	0.000	0.713	0.891	0.000	0.500	0.000	0.000	0.000	0.000	0.778	0.000	0.875	0.000	0.928
		0.955				0.905								0.875			

Prepared by National Data & Surveying Services

Avalon Blvd & Elsmere Dr

Peak Hour Turning Movement Count

ID: 18-05081-012
City: Carson

Day: Thursday
Date: 02/01/2018

PEAK HOURS		COUNT PERIODS
07:45 AM - 08:45 AM	AM	07:00 AM - 09:00 AM
NONE	NOON	NONE
05:00 PM - 06:00 PM	PM	04:00 PM - 06:00 PM

Avalon Blvd — SOUTHBOUND

AM	0	755	33	1	1309	AM
NOON	0	0	0	0	0	NOON
PM	0	1526	57	2	1179	PM

0 3 1 0

Elsmere Dr — EASTBOUND

AM	NOON	PM	
0	0	0	
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
AM	NOON	PM	

CONTROL

Signalized

	AM	NOON	PM
TEV	2256	0	2855
PHF	0.93		0.93

WESTBOUND — Elsmere Dr

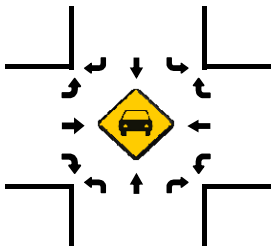
	PM	NOON	AM
1	35	0	40
0	0	0	0
1	28	0	96
0	0	0	0
	122	0	96
	PM	NOON	AM

0 0 3 0

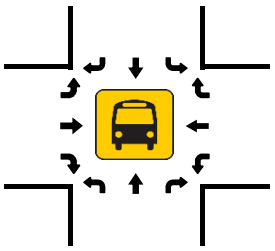
PM	1554	0	0	1142	65	PM
NOON	0	0	0	0	0	NOON
AM	851	0	0	1268	63	AM

NORTHBOUND — Avalon Blvd

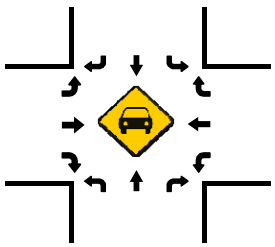
Total Vehicles (AM)



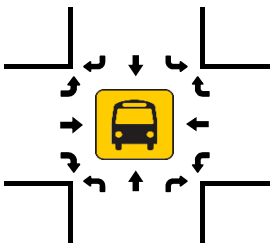
Total Vehicles (AM)



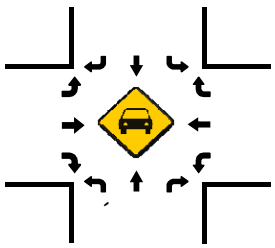
Total Vehicles (NOON)



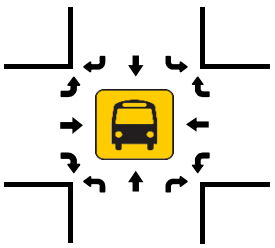
Total Vehicles (NOON)



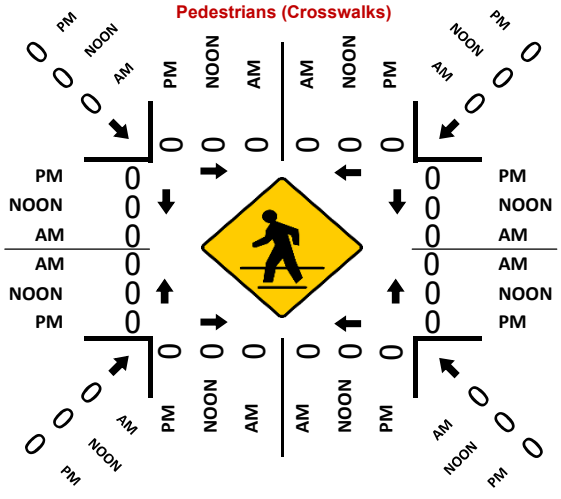
Total Vehicles (PM)



Total Vehicles (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services Intersection Turning Movement Count

Location: Avalon Blvd & Turmont St
City: Carson
Control: Signalized

Project ID: 18-05081-013
Date: 2/1/2018

Total

NS/EW Streets:	Avalon Blvd				Avalon Blvd				Turmont St				Turmont St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	3	0	0	1	3	0	0	0	0	0	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	143	16	3	10	136	0	0	0	0	0	0	52	0	18	0	378
7:15 AM	0	176	18	5	7	181	0	0	0	0	0	0	52	0	19	0	458
7:30 AM	0	181	22	12	10	197	0	0	0	0	0	0	53	0	26	0	501
7:45 AM	0	310	38	5	30	198	0	1	0	0	0	0	59	0	41	0	682
8:00 AM	0	325	25	7	17	202	0	0	0	0	0	0	42	0	34	0	652
8:15 AM	0	336	21	5	12	187	0	0	0	0	0	0	32	0	9	0	602
8:30 AM	0	246	30	3	8	203	0	0	0	0	0	0	27	0	18	0	535
8:45 AM	0	216	22	3	5	157	0	0	0	0	0	0	29	0	11	0	443
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1933	192	43	99	1461	0	1	0	0	0	0	346	0	176	0	4251
APPROACH %'s :	0.00%	89.16%	8.86%	1.98%	6.34%	93.59%	0.00%	0.06%					66.28%	0.00%	33.72%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	1217	114	20	67	790	0	1	0	0	0	0	160	0	102	0	2471
PEAK HR FACTOR :	0.000	0.906	0.750	0.714	0.558	0.973	0.000	0.250	0.000	0.000	0.000	0.000	0.678	0.000	0.622	0.000	0.906
		0.933				0.937								0.655			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	3	0	0	1	3	0	0	0	0	0	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	300	59	5	17	375	0	0	0	0	0	0	11	0	14	0	781
4:15 PM	0	273	43	12	26	319	0	0	0	0	0	0	27	0	11	0	711
4:30 PM	0	261	37	6	21	338	0	0	0	0	0	0	23	0	15	0	701
4:45 PM	0	313	38	7	20	303	0	0	0	0	0	0	23	0	15	0	719
5:00 PM	0	293	41	9	25	338	0	0	0	0	0	0	14	0	22	0	742
5:15 PM	0	288	40	10	25	405	0	0	0	0	0	0	21	0	11	0	800
5:30 PM	0	292	63	11	24	373	0	0	0	0	0	0	29	0	13	0	805
5:45 PM	0	262	49	6	27	357	0	2	0	0	0	0	20	0	14	0	737
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	2282	370	66	185	2808	0	2	0	0	0	0	168	0	115	0	5996
APPROACH %'s :	0.00%	83.96%	13.61%	2.43%	6.18%	93.76%	0.00%	0.07%					59.36%	0.00%	40.64%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	1135	193	36	101	1473	0	2	0	0	0	0	84	0	60	0	3084
PEAK HR FACTOR :	0.000	0.968	0.766	0.818	0.935	0.909	0.000	0.250	0.000	0.000	0.000	0.000	0.724	0.000	0.682	0.000	0.958
		0.932				0.916								0.857			

Prepared by National Data & Surveying Services

Avalon Blvd & Turmont St

Peak Hour Turning Movement Count

ID: 18-05081-013
City: Carson

Day: Thursday
Date: 02/01/2018

PEAK HOURS

AM: 07:45 AM - 08:45 AM
NOON: NONE
PM: 05:00 PM - 06:00 PM

COUNT PERIODS

AM: 07:00 AM - 09:00 AM
NOON: NONE
PM: 04:00 PM - 06:00 PM

Avalon Blvd

SOUTHBOUND

AM	0	790	67	1	1320	AM
NOON	0	0	0	0	0	NOON
PM	0	1473	101	2	1197	PM

0 3 1 0

EASTBOUND

AM	NOON	PM	
0	0	0	
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
AM	NOON	PM	

CONTROL

Signalized

TEV	2471 AM	0 NOON	3084 PM
PHF	0.91		0.96

WESTBOUND

	PM	NOON	AM
1	60	0	102
0	0	0	0
1	84	0	160
0	0	0	0
	294	0	181
	PM	NOON	AM

0 1 3 0

PM	1593	36	0	1135	193	PM
NOON	0	0	0	0	0	NOON
AM	970	20	0	1217	114	AM

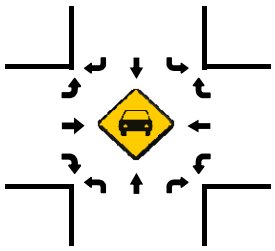
NORTHBOUND

Avalon Blvd

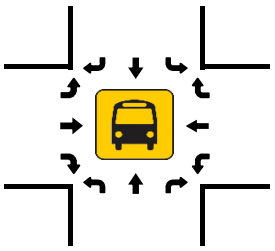
Turmont St

Turmont St

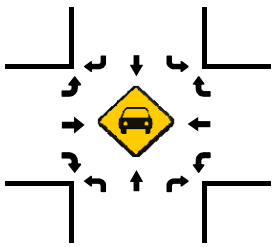
Total Vehicles (AM)



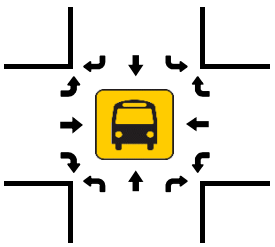
Total Vehicles (AM)



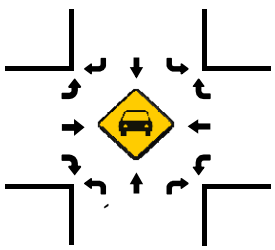
Total Vehicles (NOON)



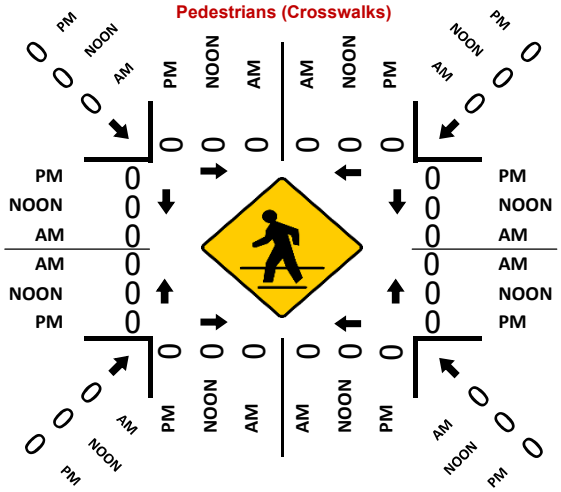
Total Vehicles (NOON)



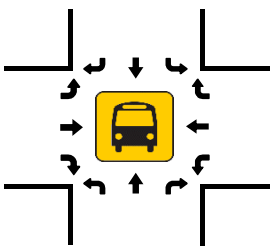
Total Vehicles (PM)



Pedestrians (Crosswalks)



Total Vehicles (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Avalon Blvd & Del Amo Blvd
City: Carson
Control: Signalized

Project ID: 18-05081-014
Date: 2/1/2018

Total

NS/EW Streets:	Avalon Blvd				Avalon Blvd				Del Amo Blvd				Del Amo Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	3	1	0	2	3	0	0	1	2	1	0	1	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	31	97	20	7	19	91	54	19	24	70	12	1	36	222	18	8	729
7:15 AM	27	132	30	9	25	121	71	6	32	94	14	2	36	260	27	8	894
7:30 AM	23	126	29	11	23	179	61	23	50	110	18	3	46	262	17	6	987
7:45 AM	34	246	42	9	26	164	67	17	57	154	16	3	30	190	21	9	1085
8:00 AM	26	219	33	8	28	151	56	17	65	131	25	4	40	217	31	5	1056
8:15 AM	27	251	30	7	27	127	62	25	72	139	26	3	41	180	25	7	1049
8:30 AM	15	192	30	11	22	117	56	16	76	92	21	2	41	163	23	5	882
8:45 AM	20	156	21	10	29	128	51	8	51	75	22	2	39	128	22	5	767
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	203	1419	235	72	199	1078	478	131	427	865	154	20	309	1622	184	53	7449
APPROACH %'s :	10.52%	73.56%	12.18%	3.73%	10.55%	57.16%	25.34%	6.95%	29.13%	59.00%	10.50%	1.36%	14.25%	74.82%	8.49%	2.44%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	110	842	134	35	104	621	246	82	244	534	85	13	157	849	94	27	4177
PEAK HR FACTOR :	0.809	0.839	0.798	0.795	0.929	0.867	0.918	0.820	0.847	0.867	0.817	0.813	0.853	0.810	0.758	0.750	0.962
	0.847				0.920				0.913				0.851				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	3	1	0	2	3	0	0	1	2	1	0	1	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	19	214	54	7	52	261	79	24	55	230	54	1	48	138	33	12	1281
4:15 PM	33	232	47	5	53	220	61	22	55	200	61	0	61	116	42	6	1214
4:30 PM	34	225	57	6	57	228	75	15	46	258	50	3	30	115	28	8	1235
4:45 PM	20	242	45	4	50	223	56	14	53	221	50	4	61	126	47	7	1223
5:00 PM	26	244	39	9	52	177	72	24	40	228	53	1	57	137	27	11	1197
5:15 PM	36	236	44	4	52	277	86	19	45	243	48	0	57	173	31	12	1363
5:30 PM	33	239	51	7	67	247	87	11	56	258	59	0	44	174	41	4	1378
5:45 PM	36	210	51	5	75	227	70	16	37	197	53	2	50	128	41	7	1205
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	237	1842	388	47	458	1860	586	145	387	1835	428	11	408	1107	290	67	10096
APPROACH %'s :	9.43%	73.27%	15.43%	1.87%	15.02%	61.00%	19.22%	4.76%	14.54%	68.96%	16.08%	0.41%	21.79%	59.13%	15.49%	3.58%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	115	961	179	24	221	924	301	68	194	950	210	5	219	610	146	34	5161
PEAK HR FACTOR :	0.799	0.985	0.877	0.667	0.825	0.834	0.865	0.708	0.866	0.921	0.890	0.313	0.898	0.876	0.777	0.708	0.936
	0.969				0.872				0.911				0.924				

Prepared by National Data & Surveying Services

Avalon Blvd & Del Amo Blvd

Peak Hour Turning Movement Count

ID: 18-05081-014
City: Carson

Day: Thursday
Date: 02/01/2018

PEAK HOURS

AM: 07:30 AM - 08:30 AM
NOON: NONE
PM: 04:45 PM - 05:45 PM

COUNT PERIODS

AM: 07:00 AM - 09:00 AM
NOON: NONE
PM: 04:00 PM - 06:00 PM

SOUTHBOUND (Avalon Blvd)

AM	246	621	104	82	1262	AM
NOON	0	0	0	0	0	NOON
PM	301	924	221	68	1369	PM
	0	3	2	0		

EASTBOUND (Del Amo Blvd)

AM	NOON	PM		
1218	0	1031		
13	0	5	0	
244	0	194	1	
534	0	950	2	
85	0	210	1	
AM	NOON	PM		

CONTROL

Signalized

TEV	4177 AM	0 NOON	5161 PM
PHF	0.96		0.94

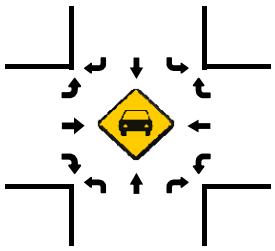
WESTBOUND (Del Amo Blvd)

	PM	NOON	AM
1	146	0	94
2	610	0	849
1	219	0	157
0	34	0	27
	1384	0	799
	PM	NOON	AM

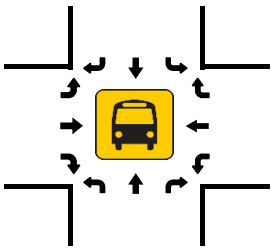
NORTHBOUND (Avalon Blvd)

PM	1377	24	115	961	179	PM
NOON	0	0	0	0	0	NOON
AM	898	35	110	842	134	AM
		0	1	3	1	

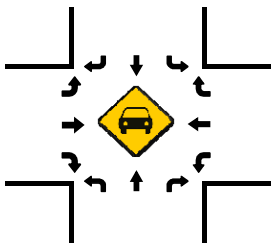
Total Vehicles (AM)



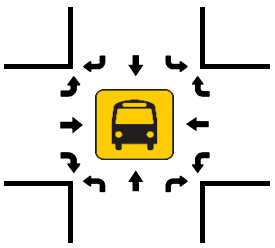
Total Vehicles (AM)



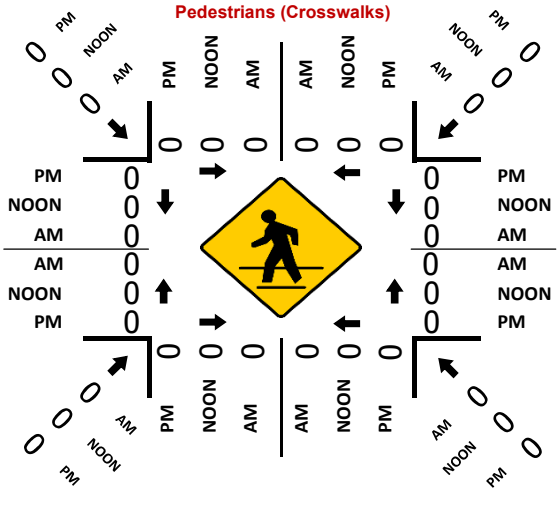
Total Vehicles (NOON)



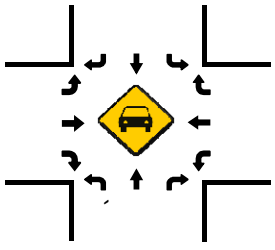
Total Vehicles (NOON)



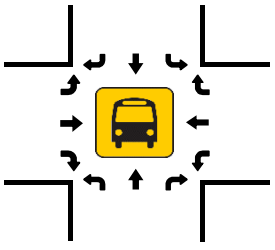
Pedestrians (Crosswalks)



Total Vehicles (PM)



Total Vehicles (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Avalon Blvd & I-405 NB Ramps
City: Carson
Control: Signalized

Project ID: 18-05081-015
Date: 2/1/2018

Total

NS/EW Streets:	Avalon Blvd				Avalon Blvd				I-405 NB Ramps				I-405 NB Ramps				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	2	0	0	0	3	1	0	0	0	0	0	1.5	0.5	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	67	136	0	0	0	144	48	0	0	0	0	0	17	0	77	0	489
7:15 AM	87	170	0	0	0	171	57	0	0	0	0	0	20	0	83	0	588
7:30 AM	100	261	0	0	0	199	76	0	0	0	0	0	14	0	76	0	726
7:45 AM	122	289	0	0	0	210	53	0	0	0	0	0	16	0	102	0	792
8:00 AM	104	308	0	0	0	181	65	0	0	0	0	0	19	0	120	0	797
8:15 AM	88	259	0	0	0	179	63	0	0	0	0	0	17	0	122	0	728
8:30 AM	70	226	0	0	0	184	58	0	0	0	0	0	10	0	96	0	644
8:45 AM	56	231	0	0	0	182	62	0	0	0	0	0	22	0	105	0	658
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	694	1880	0	0	0	1450	482	0	0	0	0	0	135	0	781	0	5422
APPROACH %'s :	26.96%	73.04%	0.00%	0.00%	0.00%	75.05%	24.95%	0.00%					14.74%	0.00%	85.26%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	414	1117	0	0	0	769	257	0	0	0	0	0	66	0	420	0	3043
PEAK HR FACTOR :	0.848	0.907	0.000	0.000	0.000	0.915	0.845	0.000	0.000	0.000	0.000	0.000	0.868	0.000	0.861	0.000	0.955
	0.929				0.933								0.874				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	2	0	0	0	3	1	0	0	0	0	0	1.5	0.5	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	67	256	0	0	0	357	132	0	0	0	0	0	24	0	103	0	939
4:15 PM	98	218	0	0	0	311	127	0	0	0	0	0	24	0	112	0	890
4:30 PM	68	228	0	0	0	313	131	0	0	0	0	0	21	0	85	0	846
4:45 PM	60	238	0	0	0	298	105	0	0	0	0	0	21	2	86	0	810
5:00 PM	69	261	0	0	0	342	126	0	0	0	0	0	16	0	99	0	913
5:15 PM	77	261	0	0	0	354	120	0	0	0	0	0	27	0	110	0	949
5:30 PM	82	277	0	0	0	344	144	0	0	0	0	0	18	2	82	0	949
5:45 PM	73	281	0	0	0	293	91	0	0	0	0	0	21	0	95	0	854
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	594	2020	0	0	0	2612	976	0	0	0	0	0	172	4	772	0	7150
APPROACH %'s :	22.72%	77.28%	0.00%	0.00%	0.00%	72.80%	27.20%	0.00%					18.14%	0.42%	81.43%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	301	1080	0	0	0	1333	481	0	0	0	0	0	82	2	386	0	3665
PEAK HR FACTOR :	0.918	0.961	0.000	0.000	0.000	0.941	0.835	0.000	0.000	0.000	0.000	0.000	0.759	0.250	0.877	0.000	0.965
	0.962				0.929								0.858				

Prepared by National Data & Surveying Services

Avalon Blvd & I-405 NB Ramps

Peak Hour Turning Movement Count

ID: 18-05081-015
City: Carson

Day: Thursday
Date: 02/01/2018

PEAK HOURS

AM	07:30 AM - 08:30 AM
NOON	NONE
PM	05:00 PM - 06:00 PM

COUNT PERIODS

AM	07:00 AM - 09:00 AM
NOON	NONE
PM	04:00 PM - 06:00 PM

Avalon Blvd — SOUTHBOUND

AM	257	769	0	0	1537	AM
NOON	0	0	0	0	0	NOON
PM	481	1333	0	0	1466	PM
	1	3	0	0		

I-405 NB Ramps — EASTBOUND

AM	NOON	PM	
671	0	784	⇦
0	0	0	↶ 0
0	0	0	↱ 0
0	0	0	→ 0
0	0	0	↷ 0
AM	NOON	PM	

CONTROL

Signalized

TEV	3043 AM	0 NOON	3665 PM
PHF	0.95		0.97

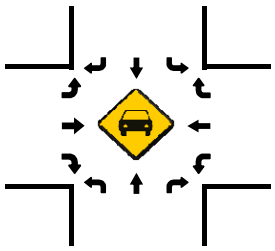
I-405 NB Ramps — WESTBOUND

PM	NOON	AM	
386	0	420	1 ↰
2	0	0	0.5 ←
82	0	66	1.5 ↶
0	0	0	0 ↩
0	0	0	⇨
PM	NOON	AM	

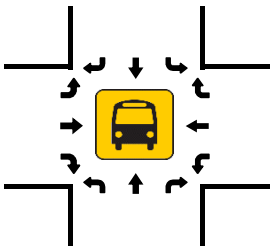
Avalon Blvd — NORTHBOUND

PM	1415	0	301	1080	0	PM
NOON	0	0	0	0	0	NOON
AM	835	0	414	1117	0	AM
		0	2	2	0	

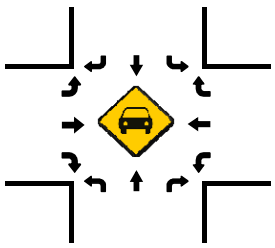
Total Vehicles (AM)



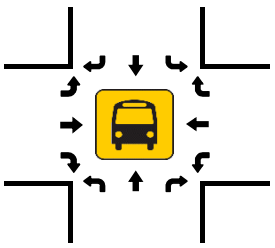
Total Vehicles (AM)



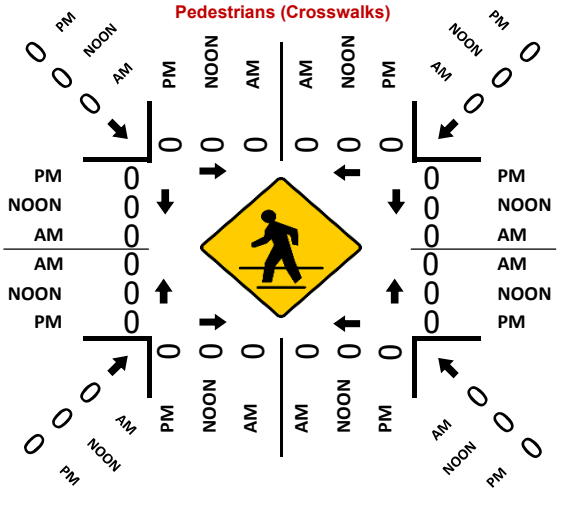
Total Vehicles (NOON)



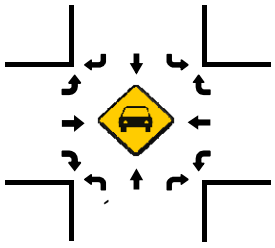
Total Vehicles (NOON)



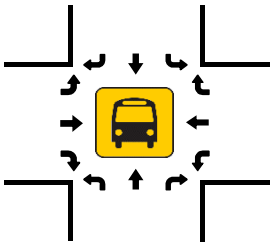
Pedestrians (Crosswalks)



Total Vehicles (PM)



Total Vehicles (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Avalon Blvd & I-405 SB Ramps
City: Carson
Control: Signalized

Project ID: 18-05081-016
Date: 2/1/2018

Total

NS/EW Streets:	Avalon Blvd				Avalon Blvd				I-405 SB Ramps				I-405 SB Ramps				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	0	2	1	0	2	2	1	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	151	44	0	0	102	63	0	81	1	80	0	0	0	0	0	522
7:15 AM	0	200	17	0	0	138	72	0	80	0	136	0	0	0	0	0	643
7:30 AM	0	270	29	0	0	175	64	0	125	0	136	0	0	0	0	0	799
7:45 AM	0	274	31	0	0	145	59	0	107	6	140	0	0	0	0	0	762
8:00 AM	0	271	23	0	0	112	73	0	130	7	142	0	0	0	0	0	758
8:15 AM	0	196	25	0	0	136	54	0	122	2	90	0	0	0	0	0	625
8:30 AM	0	205	26	0	0	131	48	0	114	0	74	0	0	0	0	0	598
8:45 AM	0	167	28	0	0	136	53	0	98	4	71	0	0	0	0	0	557
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1734	223	0	0	1075	486	0	857	20	869	0	0	0	0	0	5264
APPROACH %'s :	0.00%	88.61%	11.39%	0.00%	0.00%	68.87%	31.13%	0.00%	49.08%	1.15%	49.77%	0.00%					
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	1015	100	0	0	570	268	0	442	13	554	0	0	0	0	0	2962
PEAK HR FACTOR :	0.000	0.926	0.806	0.000	0.000	0.814	0.918	0.000	0.850	0.464	0.975	0.000	0.000	0.000	0.000	0.000	0.927
		0.914				0.877				0.904							

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	0	2	1	0	2	2	1	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	304	47	0	0	252	103	0	46	32	68	0	0	0	0	0	852
4:15 PM	0	238	34	0	0	211	94	0	58	40	66	0	0	0	0	0	741
4:30 PM	0	267	39	0	0	249	103	0	57	30	77	0	0	0	0	0	822
4:45 PM	0	254	57	0	0	250	83	0	63	48	82	0	0	0	0	0	837
5:00 PM	0	298	47	0	0	253	89	0	50	45	97	0	0	0	0	0	879
5:15 PM	0	290	42	0	0	249	105	0	63	41	83	0	0	0	0	0	873
5:30 PM	0	259	35	0	0	303	87	0	69	35	83	0	0	0	0	0	871
5:45 PM	0	261	40	0	0	252	79	0	68	25	105	0	0	0	0	0	830
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	2171	341	0	0	2019	743	0	474	296	661	0	0	0	0	0	6705
APPROACH %'s :	0.00%	86.43%	13.57%	0.00%	0.00%	73.10%	26.90%	0.00%	33.12%	20.68%	46.19%	0.00%					
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	1101	181	0	0	1055	364	0	245	169	345	0	0	0	0	0	3460
PEAK HR FACTOR :	0.000	0.924	0.794	0.000	0.000	0.870	0.867	0.000	0.888	0.880	0.889	0.000	0.000	0.000	0.000	0.000	0.984
		0.929				0.910				0.983							

Prepared by National Data & Surveying Services

Avalon Blvd & I-405 SB Ramps

Peak Hour Turning Movement Count

ID: 18-05081-016
City: Carson

Day: Thursday
Date: 02/01/2018

PEAK HOURS

AM: 07:15 AM - 08:15 AM
NOON: NONE
PM: 04:45 PM - 05:45 PM

COUNT PERIODS

AM: 07:00 AM - 09:00 AM
NOON: NONE
PM: 04:00 PM - 06:00 PM

Avalon Blvd — SOUTHBOUND

AM	268	570	0	0	1457	AM
NOON	0	0	0	0	0	NOON
PM	364	1055	0	0	1346	PM

I-405 SB Ramps — EASTBOUND

AM	NOON	PM	
268	0	364	⇦
0	0	0	↶ 0
442	0	245	↱ 2
13	0	169	→ 2
554	0	345	↴ 1
AM	NOON	PM	

CONTROL

Signalized

TEV	2962 AM	0 NOON	3460 PM
PHF	0.93		0.98

I-405 SB Ramps — WESTBOUND

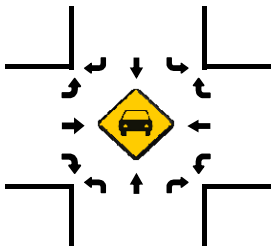
PM	NOON	AM	
0	0	0	↶ 0
0	0	0	← 0
0	0	0	↰ 0
0	0	0	↩ 0
350	0	113	⇨
PM	NOON	AM	

Avalon Blvd — NORTHBOUND

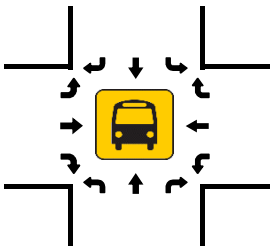
PM	1400	0	0	1101	181	PM
NOON	0	0	0	0	0	NOON
AM	1124	0	0	1015	100	AM

0 1 2 0

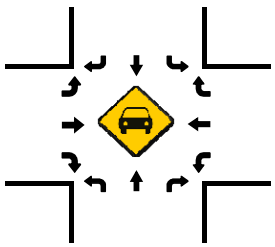
Total Vehicles (AM)



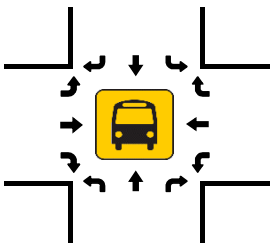
Total Vehicles (AM)



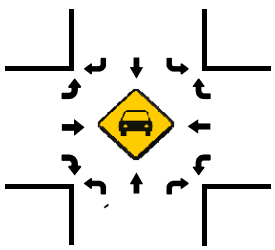
Total Vehicles (NOON)



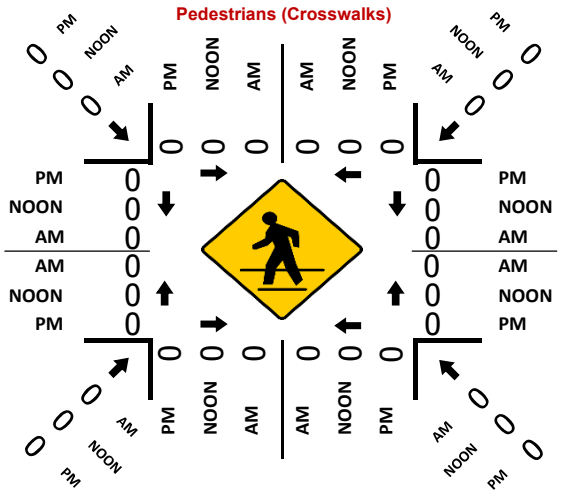
Total Vehicles (NOON)



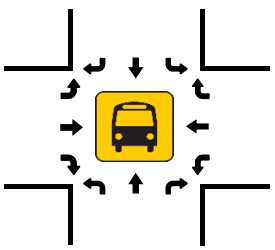
Total Vehicles (PM)



Pedestrians (Crosswalks)



Total Vehicles (PM)



Turning Movement Count Report AM

Location ID: 17
North/South: Main St
East/West: WB SR-91 ramps

Date: 05/01/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	0	101	15	96	0	79	27	94	0	0	0	0	412
7:15	0	120	10	98	0	90	18	108	0	0	0	0	444
7:30	0	103	20	90	0	126	26	122	0	0	0	0	487
7:45	0	146	15	126	0	127	27	176	0	0	0	0	617
8:00	0	117	20	91	0	118	22	127	0	0	0	0	495
8:15	0	99	19	90	0	98	12	105	1	0	0	0	424
8:30	0	92	19	99	0	79	20	120	1	0	0	0	430
8:45	0	108	19	104	0	88	21	141	0	0	0	0	481
Total Volume:	0	886	137	794	0	805	173	993	2	0	0	0	3790
Approach %	0%	87%	13%	50%	0%	50%	15%	85%	0%	0%	0%	0%	
Peak Hr Begin:	7:15												
PHV	0	486	65	405	0	461	93	533	0	0	0	0	2043
PHF	0.856			0.856			0.771			0.000			0.828

Turning Movement Count Report PM

Location ID: 17
North/South: Main St
East/West: WB SR-91 ramps

Date: 05/01/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	0	187	32	78	0	54	26	157	0	0	0	0	534
16:15	0	134	37	60	0	66	27	125	0	0	0	0	449
16:30	0	195	20	74	0	47	25	146	1	0	0	0	508
16:45	0	162	22	115	0	60	22	136	0	0	0	0	517
17:00	0	220	47	79	0	69	30	146	0	0	0	0	591
17:15	0	149	19	58	0	64	21	146	0	0	0	0	457
17:30	0	151	18	51	0	43	13	121	0	0	0	0	397
17:45	0	120	17	59	0	43	14	110	0	0	0	0	363
Total Volume:	0	1318	212	574	0	446	178	1087	1	0	0	0	3816
Approach %	0%	86%	14%	56%	0%	44%	14%	86%	0%	0%	0%	0%	
Peak Hr Begin:	16:30												
PHV	0	726	108	326	0	240	98	574	1	0	0	0	2073
PHF	0.781			0.809			0.956			0.000			0.877

Pedestrian/Bicycle Count Report

Location ID: 17
North/South: Main St
East/West: WB SR-91 ramps

Date: 05/01/18
City: Carson, CA

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
7:00	0	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	0
8:00	0	0	1	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	1	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	1	0	0	0	0	0
17:00	0	0	1	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0

Turning Movement Count Report AM

Location ID: 18
North/South: Main St
East/West: Albertoni Street

Date: 05/01/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	59	89	29	42	80	20	26	69	35	7	53	11	520
7:15	77	91	32	41	116	23	23	66	27	20	85	5	606
7:30	70	121	40	53	108	29	34	93	28	10	66	6	658
7:45	43	87	44	75	110	25	37	116	27	25	80	14	683
8:00	87	117	36	57	85	36	27	85	29	18	71	7	655
8:15	85	82	32	45	77	25	28	63	23	15	76	8	559
8:30	45	85	48	57	85	27	27	66	25	19	77	14	575
8:45	61	95	43	55	84	37	29	89	27	15	67	17	619
Total Volume:	527	767	304	425	745	222	231	647	221	129	575	82	4875
Approach %	33%	48%	19%	31%	54%	16%	21%	59%	20%	16%	73%	10%	
Peak Hr Begin:	7:15												
PHV	277	416	152	226	419	113	121	360	111	73	302	32	2602
PHF	0.880			0.902			0.822			0.855			0.952

Turning Movement Count Report PM

Location ID: 18
North/South: Main St
East/West: Albertoni Street

Date: 05/01/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	34	114	85	60	68	28	43	93	19	27	160	23	754
16:15	29	100	58	46	67	25	26	94	27	43	159	22	696
16:30	43	148	60	63	63	29	43	91	25	35	161	12	773
16:45	39	125	46	60	52	23	36	88	17	34	134	15	669
17:00	50	181	74	57	73	29	30	100	34	36	157	19	840
17:15	38	139	40	46	59	26	26	104	27	38	196	12	751
17:30	25	127	48	39	74	22	27	77	23	40	145	13	660
17:45	26	108	20	37	54	32	32	82	31	44	137	6	609
Total Volume:	284	1042	431	408	510	214	263	729	203	297	1249	122	5752
Approach %	16%	59%	25%	36%	45%	19%	22%	61%	17%	18%	75%	7%	
Peak Hr Begin:	16:30												
PHV	170	593	220	226	247	107	135	383	103	143	648	58	3033
PHF	0.806			0.912			0.947			0.863			0.903

Pedestrian/Bicycle Count Report

Location ID: 18
North/South: Main St
East/West: Albertoni Street

Date: 05/01/18
City: Carson, CA

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
7:00	1	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	0
8:00	1	0	0	0	0	0	0	0
8:15	0	1	0	0	0	0	0	1
8:30	0	0	1	0	0	0	0	0
8:45	0	0	1	0	1	0	1	1

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
16:00	1	0	0	0	0	0	0	0
16:15	2	0	0	0	0	0	0	0
16:30	2	1	0	0	0	0	0	0
16:45	3	1	1	0	0	0	1	0
17:00	1	0	0	0	0	0	0	0
17:15	1	1	0	0	0	0	0	0
17:30	0	0	0	0	1	1	0	1
17:45	0	1	0	0	0	0	0	0

Turning Movement Count Report AM

Location ID: 19
North/South: Main St
East/West: Victoria Street

Date: 05/01/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	28	66	8	34	116	40	9	78	10	8	50	14	461
7:15	24	86	12	32	132	50	21	60	13	6	93	17	546
7:30	20	109	16	35	147	60	22	117	13	8	76	19	642
7:45	28	91	16	30	130	47	34	119	12	9	107	14	637
8:00	23	71	18	23	120	27	40	98	12	9	132	18	591
8:15	21	72	14	16	106	26	30	74	10	6	130	20	525
8:30	20	77	17	28	116	23	21	76	12	10	98	12	510
8:45	34	59	13	22	84	23	26	76	12	14	86	15	464
Total Volume:	198	631	114	220	951	296	203	698	94	70	772	129	4376
Approach %	21%	67%	12%	15%	65%	20%	20%	70%	9%	7%	80%	13%	
Peak Hr Begin:	7:15												
PHV	95	357	62	120	529	184	117	394	50	32	408	68	2416
PHF	0.886			0.861			0.850			0.799			0.941

Turning Movement Count Report PM

Location ID: 19
North/South: Main St
East/West: Victoria Street

Date: 05/01/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	23	130	35	20	128	20	44	71	16	16	218	23	744
16:15	15	113	50	23	106	24	38	72	10	17	258	29	755
16:30	31	130	44	32	143	35	46	74	6	22	248	17	828
16:45	17	135	40	27	122	22	34	77	15	20	243	24	776
17:00	26	173	45	32	168	35	42	98	7	16	250	23	915
17:15	12	130	34	45	171	35	39	64	17	17	222	17	803
17:30	14	138	44	31	148	26	45	79	12	16	222	22	797
17:45	16	107	41	22	103	18	29	63	7	16	210	15	647
Total Volume:	154	1056	333	232	1089	215	317	598	90	140	1871	170	6265
Approach %	10%	68%	22%	15%	71%	14%	32%	60%	9%	6%	86%	8%	
Peak Hr Begin:	16:30												
PHV	86	568	163	136	604	127	161	313	45	75	963	81	3322
PHF	0.837			0.864			0.883			0.968			0.908

Pedestrian/Bicycle Count Report

Location ID: 19
North/South: Main St
East/West: Victoria Street

Date: 05/01/18
City: Carson, CA

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
7:00	1	0	1	0	0	0	0	1
7:15	0	0	0	0	1	0	0	0
7:30	0	0	0	0	0	1	0	1
7:45	2	0	2	1	0	0	1	0
8:00	0	0	0	0	0	0	0	1
8:15	0	0	0	0	0	0	0	0
8:30	1	0	1	0	1	1	2	1
8:45	0	0	0	0	0	0	0	0

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
16:00	0	1	0	0	0	0	0	1
16:15	0	0	0	1	0	0	0	0
16:30	0	0	0	0	0	0	1	0
16:45	1	1	0	0	0	0	0	0
17:00	1	0	0	0	0	0	1	0
17:15	0	0	0	0	0	0	3	0
17:30	1	2	1	1	2	0	0	0
17:45	0	0	0	0	0	0	0	0

Turning Movement Count Report AM

Location ID: 20
North/South: Figueroa St
East/West: Victoria Street

Date: 05/01/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	16	70	7	14	116	20	19	114	38	23	82	25	544
7:15	27	107	6	22	115	13	13	120	39	38	102	23	625
7:30	26	124	6	28	139	14	16	123	33	29	82	26	646
7:45	44	123	12	15	119	17	26	162	27	34	107	35	721
8:00	25	88	13	16	123	20	24	143	37	39	140	40	708
8:15	25	65	12	13	117	9	23	141	54	42	129	50	680
8:30	27	77	13	21	98	14	25	109	39	40	110	52	625
8:45	18	68	7	16	103	7	20	119	45	24	122	31	580
Total Volume:	208	722	76	145	930	114	166	1031	312	269	874	282	5129
Approach %	21%	72%	8%	12%	78%	10%	11%	68%	21%	19%	61%	20%	
Peak Hr Begin:	7:30												
PHV	120	400	43	72	498	60	89	569	151	144	458	151	2755
PHF	0.786			0.870			0.928			0.852			0.955

Turning Movement Count Report PM

Location ID: 20
North/South: Figueroa St
East/West: Victoria Street

Date: 05/01/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	18	139	23	14	143	11	30	112	33	42	166	25	756
16:15	26	141	19	12	117	15	34	104	19	64	232	37	820
16:30	33	155	14	13	133	10	40	119	32	61	224	26	860
16:45	21	156	9	23	151	18	36	116	29	55	248	30	892
17:00	29	190	17	21	174	19	39	137	21	45	191	29	912
17:15	26	176	21	21	150	20	33	134	35	54	213	36	919
17:30	31	193	20	15	186	10	36	113	20	65	193	19	901
17:45	29	131	15	14	120	5	24	61	29	48	203	21	700
Total Volume:	213	1281	138	133	1174	108	272	896	218	434	1670	223	6760
Approach %	13%	78%	8%	9%	83%	8%	20%	65%	16%	19%	72%	10%	
Peak Hr Begin:	16:45												
PHV	107	715	67	80	661	67	144	500	105	219	845	114	3624
PHF	0.911			0.944			0.927			0.884			0.986

Pedestrian/Bicycle Count Report

Location ID: 20
North/South: Figueroa St
East/West: Victoria Street

Date: 05/01/18
City: Carson, CA

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
7:00	0	0	0	0	0	0	2	0
7:15	0	0	1	0	3	0	0	0
7:30	0	0	0	0	0	0	2	0
7:45	0	0	0	1	0	0	3	0
8:00	1	0	1	0	2	0	3	0
8:15	0	0	2	0	2	0	2	0
8:30	0	0	3	0	4	1	1	0
8:45	0	0	1	0	1	0	1	0

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
16:00	0	0	4	0	1	0	6	0
16:15	0	0	1	0	0	0	4	0
16:30	0	0	0	0	1	1	5	0
16:45	2	0	1	0	1	0	2	0
17:00	1	0	0	0	0	0	1	0
17:15	0	0	0	1	1	0	2	0
17:30	0	0	0	0	1	0	4	0
17:45	0	0	0	0	3	0	11	0

Turning Movement Count Report AM

Location ID: 21
North/South: I-110 NB ramp
East/West: 190th St

Date: 05/01/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	0	0	0	54	118	0	0	0	0	0	139	24	335
7:15	0	0	0	53	138	0	0	0	0	0	156	28	375
7:30	0	0	0	28	158	0	0	0	0	0	144	22	352
7:45	0	0	0	45	159	0	0	0	0	0	176	35	415
8:00	0	0	0	43	127	0	0	0	0	0	209	33	412
8:15	0	0	0	59	147	0	0	0	0	0	237	46	489
8:30	0	0	0	51	122	0	0	0	0	0	188	44	405
8:45	0	0	0	28	126	0	0	0	0	0	195	38	387
Total Volume:	0	0	0	361	1095	0	0	0	0	0	1444	270	3170
Approach %	0%	0%	0%	25%	75%	0%	0%	0%	0%	0%	84%	16%	
Peak Hr Begin:	7:45												
PHV	0	0	0	198	555	0	0	0	0	0	810	158	1721
PHF	0.000			0.914			0.000			0.855			0.880

Turning Movement Count Report PM

Location ID: 21
North/South: I-110 NB ramp
East/West: 190th St

Date: 05/01/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	0	0	0	54	163	0	0	0	0	0	293	113	623
16:15	0	0	0	53	99	0	0	0	0	0	314	105	571
16:30	0	0	0	56	136	0	0	0	0	0	315	102	609
16:45	0	0	0	46	152	0	0	0	0	0	335	92	625
17:00	0	0	0	64	162	0	0	0	0	0	284	108	618
17:15	0	0	0	67	170	0	0	0	0	0	309	131	677
17:30	0	0	0	64	192	0	0	0	0	0	260	104	620
17:45	0	0	0	53	135	0	0	0	0	0	276	100	564
Total Volume:	0	0	0	457	1209	0	0	0	0	0	2386	855	4907
Approach %	0%	0%	0%	27%	73%	0%	0%	0%	0%	0%	74%	26%	
Peak Hr Begin:	16:45												
PHV	0	0	0	241	676	0	0	0	0	0	1188	435	2540
PHF	0.000			0.896			0.000			0.922			0.938

Pedestrian/Bicycle Count Report

Location ID: 21
North/South: I-110 NB ramp
East/West: 190th St

Date: 05/01/18
City: Carson, CA

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
7:00	0	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	0
8:00	0	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report AM

Location ID: 22
North/South: I-110 SB ramp
East/West: 190th St

Date: 05/01/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	166	0	50	0	116	0	0	0	0	0	97	0	429
7:15	174	0	57	0	159	0	0	0	0	0	150	0	540
7:30	187	0	53	0	150	0	0	0	0	0	130	0	520
7:45	197	0	58	0	138	0	0	0	0	0	163	0	556
8:00	156	0	62	0	158	0	0	0	0	0	202	0	578
8:15	178	0	55	0	134	0	0	0	0	0	209	0	576
8:30	155	0	55	0	113	0	0	0	0	0	185	0	508
8:45	145	0	57	0	134	0	0	0	0	0	144	0	480
Total Volume:	1358	0	447	0	1102	0	0	0	0	0	1280	0	4187
Approach %	75%	0%	25%	0%	100%	0%	0%	0%	0%	0%	100%	0%	
Peak Hr Begin:	7:30												
PHV	718	0	228	0	580	0	0	0	0	0	704	0	2230
PHF	0.927			0.918			0.000			0.842			0.965

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report PM

Location ID: 22
North/South: I-110 SB ramp
East/West: 190th St

Date: 05/01/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	106	0	81	0	140	0	0	0	0	0	361	0	688
16:15	109	0	64	0	114	0	0	0	0	0	335	0	622
16:30	113	0	72	0	150	0	0	0	0	0	363	0	698
16:45	111	0	76	0	135	0	0	0	0	0	328	0	650
17:00	98	0	72	0	184	0	0	0	0	0	377	0	731
17:15	115	0	70	0	170	0	0	0	0	0	326	0	681
17:30	137	0	91	0	181	0	0	0	0	0	292	0	701
17:45	106	0	75	0	127	0	0	0	0	0	301	0	609
Total Volume:	895	0	601	0	1201	0	0	0	0	0	2683	0	5380
Approach %	60%	0%	40%	0%	100%	0%	0%	0%	0%	0%	100%	0%	
Peak Hr Begin:	16:45												
PHV	461	0	309	0	670	0	0	0	0	0	1323	0	2763
PHF	0.844			0.910			0.000			0.877			0.945

Pedestrian/Bicycle Count Report

Location ID: 22
North/South: I-110 SB ramp
East/West: 190th St

Date: 05/01/18
City: Carson, CA

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
7:00	0	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	0
8:00	1	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	1	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
17:00	1	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0

National Data & Surveying Services

Intersection Turning Movement Count

Location: Central Ave & Victoria St
City: Carson
Control: Signalized

Project ID: 18-05553-005
Date: 8/28/2018

Total

NS/EW Streets:	Central Ave				Central Ave				Victoria St				Victoria St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	2	2	1	0	2	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	22	114	6	0	40	116	74	0	30	38	11	0	1	37	19	0	508
7:15 AM	22	114	1	0	35	139	100	0	25	37	10	0	5	58	27	0	573
7:30 AM	26	120	4	0	52	178	147	0	52	44	27	0	3	51	27	0	731
7:45 AM	31	140	4	1	41	207	153	0	34	61	44	0	4	53	32	0	805
8:00 AM	38	157	8	0	59	180	196	0	58	50	34	0	9	74	26	0	889
8:15 AM	30	113	7	0	42	169	177	0	77	48	18	0	7	99	32	0	819
8:30 AM	24	95	4	1	50	145	143	0	69	40	24	0	2	55	31	0	683
8:45 AM	15	100	5	0	36	116	83	0	43	34	15	1	4	55	24	0	531
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	208	953	39	2	355	1250	1073	0	388	352	183	1	35	482	218	0	5539
APPROACH %'s :	17.30%	79.28%	3.24%	0.17%	13.26%	46.68%	40.07%	0.00%	41.99%	38.10%	19.81%	0.11%	4.76%	65.58%	29.66%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	125	530	23	1	194	734	673	0	221	203	123	0	23	277	117	0	3244
PEAK HR FACTOR :	0.822	0.844	0.719	0.250	0.822	0.886	0.858	0.000	0.718	0.832	0.699	0.000	0.639	0.699	0.914	0.000	0.912
	0.836				0.920				0.956				0.755				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	2	2	1	0	2	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	34	114	14	0	45	137	63	1	148	169	47	0	4	68	64	0	908
4:15 PM	24	152	9	0	50	157	71	0	98	148	37	0	2	34	36	0	818
4:30 PM	38	116	8	1	27	139	74	0	112	131	41	1	4	71	45	0	808
4:45 PM	28	140	9	0	47	174	90	0	107	159	47	0	1	62	37	0	901
5:00 PM	35	138	8	1	42	144	93	1	130	160	49	0	8	108	70	0	987
5:15 PM	22	126	9	0	25	181	98	1	127	178	54	0	6	88	63	0	978
5:30 PM	39	120	9	0	58	149	55	0	140	188	40	0	3	84	41	0	926
5:45 PM	28	160	11	0	27	157	56	0	83	163	42	0	2	71	37	0	837
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	248	1066	77	2	321	1238	600	3	945	1296	357	1	30	586	393	0	7163
APPROACH %'s :	17.80%	76.53%	5.53%	0.14%	14.85%	57.26%	27.75%	0.14%	36.36%	49.87%	13.74%	0.04%	2.97%	58.08%	38.95%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	124	524	35	1	172	648	336	2	504	685	190	0	18	342	211	0	3792
PEAK HR FACTOR :	0.795	0.936	0.972	0.250	0.741	0.895	0.857	0.500	0.900	0.911	0.880	0.000	0.563	0.792	0.754	0.000	0.960
	0.940				0.931				0.937				0.767				

Prepared by National Data & Surveying Services

Central Ave & Victoria St

Peak Hour Turning Movement Count

ID: 18-05553-005
City: Carson

Day: Tuesday
Date: 08/28/2018

PEAK HOURS	COUNT PERIODS
07:30 AM - 08:30 AM	07:00 AM - 09:00 AM
NONE	NONE
04:45 PM - 05:45 PM	04:00 PM - 06:00 PM

Central Ave — SOUTHBOUND

AM	673	734	194	0	868	AM
NOON	0	0	0	0	0	NOON
PM	336	648	172	2	1241	PM

Victoria St — EASTBOUND

AM	NOON	PM		
1076	0	803	⇦	
1	0	1	↶	0
221	0	504	↱	2
203	0	685	→	2
123	0	190	↷	0
AM	NOON	PM		

WESTBOUND — Victoria St

PM	NOON	AM		
211	0	117	↶	0
342	0	277	←	2
18	0	23	↰	1
0	0	0	↰	0
892	0	420	⇨	
PM	NOON	AM		

	1	2	2	0
	0	1	2	1

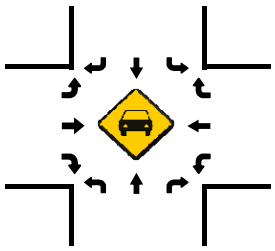
CONTROL: Signalized

TEV	3245 AM	0 NOON	3793 PM
PHF	0.91		0.96

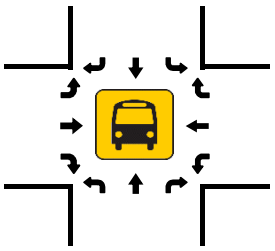
Central Ave — NORTHBOUND

PM	857	1	124	524	35	PM
NOON	0	0	0	0	0	NOON
AM	881	1	125	530	23	AM

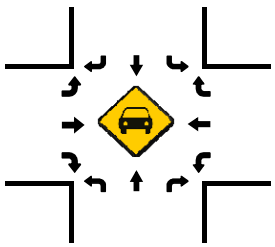
Total Vehicles (AM)



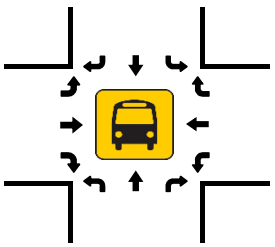
Total Vehicles (AM)



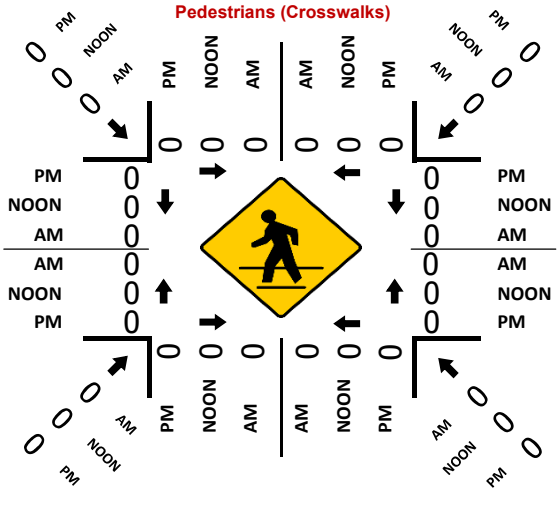
Total Vehicles (NOON)



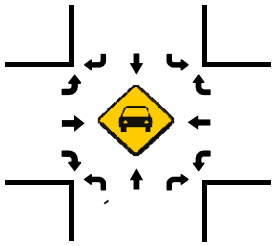
Total Vehicles (NOON)



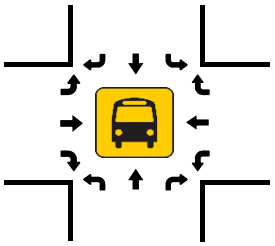
Pedestrians (Crosswalks)



Total Vehicles (PM)



Total Vehicles (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Hamilton Ave & Del Amo Blvd
City: Torrance
Control: 4-Way Stop

Project ID: 18-05553-001
Date: 8/28/2018

Total

NS/EW Streets:	Hamilton Ave				Hamilton Ave				Del Amo Blvd				Del Amo Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	11	21	19	0	8	6	5	0	6	53	21	1	86	135	48	0	420
7:15 AM	12	23	12	0	8	12	0	0	6	51	21	0	108	161	85	0	499
7:30 AM	15	29	10	0	13	25	5	0	4	60	20	0	104	167	75	0	527
7:45 AM	10	42	23	0	11	14	6	0	10	83	20	0	89	204	105	0	617
8:00 AM	21	36	21	0	18	12	3	0	17	69	19	0	75	174	87	1	553
8:15 AM	14	40	22	0	8	9	4	0	14	59	24	0	66	156	60	1	477
8:30 AM	11	43	25	0	19	17	11	0	13	47	21	0	90	157	70	1	525
8:45 AM	17	50	16	0	27	11	7	0	9	55	15	1	75	116	57	0	456
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	111	284	148	0	112	106	41	0	79	477	161	2	693	1270	587	3	4074
APPROACH %'s :	20.44%	52.30%	27.26%	0.00%	43.24%	40.93%	15.83%	0.00%	10.99%	66.34%	22.39%	0.28%	27.14%	49.75%	22.99%	0.12%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	58	130	66	0	50	63	14	0	37	263	80	0	376	706	352	1	2196
PEAK HR FACTOR :	0.690	0.774	0.717	0.000	0.694	0.630	0.583	0.000	0.544	0.792	0.952	0.000	0.870	0.865	0.838	0.250	0.890
	0.814				0.738				0.841				0.901				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	8	18	18	0	73	59	15	0	5	151	49	0	77	109	23	1	606
4:15 PM	3	15	32	1	63	44	12	0	2	131	39	0	80	103	32	0	557
4:30 PM	4	14	29	0	68	55	15	0	5	135	60	0	63	96	25	0	569
4:45 PM	9	9	24	0	69	70	7	0	3	151	40	0	73	116	23	0	594
5:00 PM	8	6	32	0	78	99	29	0	2	134	51	0	61	104	20	0	624
5:15 PM	2	5	39	1	77	91	11	0	3	153	46	0	70	123	29	0	650
5:30 PM	2	3	36	0	66	70	18	0	1	130	52	0	59	95	18	0	550
5:45 PM	1	5	27	0	73	93	10	0	0	145	48	0	73	103	20	0	598
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	37	75	237	2	567	581	117	0	21	1130	385	0	556	849	190	1	4748
APPROACH %'s :	10.54%	21.37%	67.52%	0.57%	44.82%	45.93%	9.25%	0.00%	1.37%	73.57%	25.07%	0.00%	34.84%	53.20%	11.90%	0.06%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	23	34	124	1	292	315	62	0	13	573	197	0	267	439	97	0	2437
PEAK HR FACTOR :	0.639	0.607	0.795	0.250	0.936	0.795	0.534	0.000	0.650	0.936	0.821	0.000	0.914	0.892	0.836	0.000	0.937
	0.968				0.812				0.969				0.904				

Prepared by National Data & Surveying Services

Hamilton Ave & Del Amo Blvd

Peak Hour Turning Movement Count

ID: 18-05553-001
City: Torrance

Day: Tuesday
Date: 08/28/2018

PEAK HOURS	COUNT PERIODS
07:15 AM - 08:15 AM	07:00 AM - 09:00 AM
NONE	NONE
04:30 PM - 05:30 PM	04:00 PM - 06:00 PM

Hamilton Ave — SOUTHBOUND

AM	14	63	50	0	519	AM
NOON	0	0	0	0	0	NOON
PM	62	315	292	0	144	PM

Del Amo Blvd — EASTBOUND

AM	NOON	PM		
778	0	524	⇦	
0	0	0	↶	0
37	0	13	↱	1
263	0	573	→	2
80	0	197	↴	0
AM	NOON	PM		

Del Amo Blvd — WESTBOUND

PM	NOON	AM		
97	0	352	↰	0
439	0	706	←	2
267	0	376	↰	1
0	0	1	↶	0
989	0	380	⇨	
PM	NOON	AM		

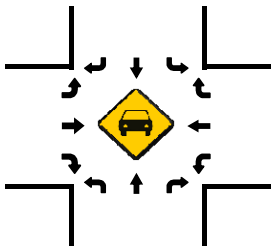
Hamilton Ave — NORTHBOUND

PM	780	1	23	34	124	PM
NOON	0	0	0	0	0	NOON
AM	519	0	58	130	66	AM

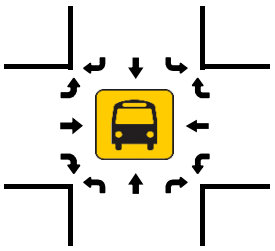
⇩	↶	↰	↑	↱
	0	1	2	0

CONTROL			
4-Way Stop			
TEV	2196 AM	0 NOON	2437 PM
PHF	0.89		0.94

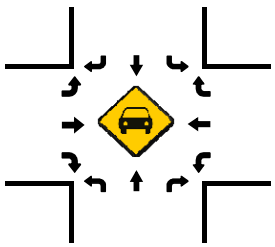
Total Vehicles (AM)



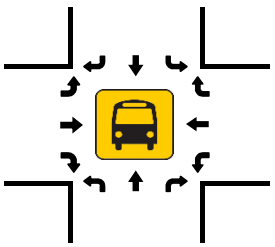
Total Vehicles (AM)



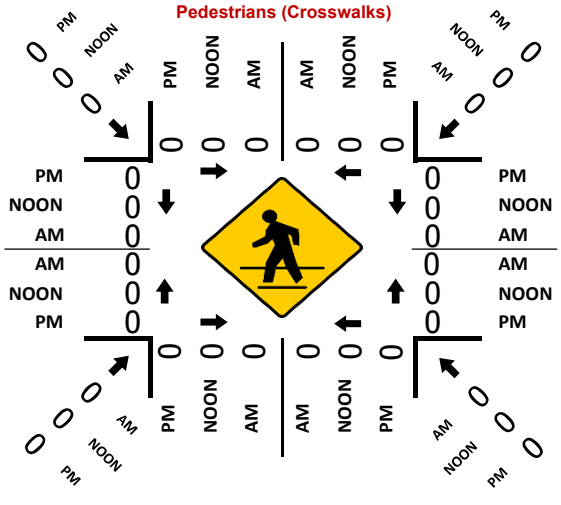
Total Vehicles (NOON)



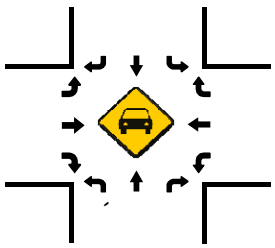
Total Vehicles (NOON)



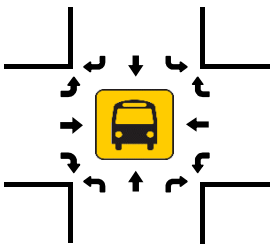
Pedestrians (Crosswalks)



Total Vehicles (PM)



Total Vehicles (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Hamilton Ave & I-110 SB Ramps
City: Torrance
Control: 3-Way Stop (NB/SB/WB)

Project ID: 18-05553-002
Date: 8/28/2018

Total

NS/EW Streets:	Hamilton Ave				Hamilton Ave				I-110 SB Ramps				I-110 SB Ramps				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	2	0	0	0	0	0	0	2	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	11	32	0	92	17	0	0	0	0	0	0	143	0	38	0	333
7:15 AM	0	12	45	0	123	17	0	0	0	0	0	0	158	0	33	0	388
7:30 AM	0	22	55	0	125	20	0	0	0	0	0	0	137	0	36	0	395
7:45 AM	0	26	35	0	106	22	0	0	0	0	0	0	174	0	50	0	413
8:00 AM	0	18	31	0	79	21	0	0	0	0	0	0	186	0	59	0	394
8:15 AM	0	23	23	0	72	28	0	0	0	0	0	0	181	0	52	0	379
8:30 AM	0	14	28	0	96	26	0	0	0	0	0	0	191	0	62	0	417
8:45 AM	0	24	28	0	84	20	0	0	0	0	0	0	206	0	61	0	423
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	150	277	0	777	171	0	0	0	0	0	0	1376	0	391	0	3142
APPROACH %'s :	0.00%	35.13%	64.87%	0.00%	81.96%	18.04%	0.00%	0.00%					77.87%	0.00%	22.13%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	79	110	0	331	95	0	0	0	0	0	0	764	0	234	0	1613
PEAK HR FACTOR :	0.000	0.823	0.887	0.000	0.862	0.848	0.000	0.000	0.000	0.000	0.000	0.000	0.927	0.000	0.944	0.000	0.953
	0.909				0.873								0.934				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	2	0	0	0	0	0	0	2	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	11	80	0	149	29	0	0	0	0	0	0	76	0	33	0	378
4:15 PM	0	20	105	0	153	25	0	0	0	0	0	0	80	0	31	0	414
4:30 PM	0	17	88	0	145	21	0	0	0	0	0	0	87	0	33	0	391
4:45 PM	0	13	133	0	162	17	0	0	0	0	0	0	71	0	27	0	423
5:00 PM	0	17	106	0	165	39	0	0	0	0	0	0	67	0	25	0	419
5:15 PM	0	20	183	0	152	47	0	0	0	0	0	0	69	0	29	0	500
5:30 PM	0	14	118	0	144	41	0	0	0	0	0	0	86	0	24	0	427
5:45 PM	0	10	127	0	173	42	0	0	0	0	0	0	74	0	24	0	450
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	122	940	0	1243	261	0	0	0	0	0	0	610	0	226	0	3402
APPROACH %'s :	0.00%	11.49%	88.51%	0.00%	82.65%	17.35%	0.00%	0.00%					72.97%	0.00%	27.03%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	61	534	0	634	169	0	0	0	0	0	0	296	0	102	0	1796
PEAK HR FACTOR :	0.000	0.763	0.730	0.000	0.916	0.899	0.000	0.000	0.000	0.000	0.000	0.000	0.860	0.000	0.879	0.000	0.898
	0.733				0.934								0.905				

Prepared by National Data & Surveying Services

Hamilton Ave & I-110 SB Ramps

Peak Hour Turning Movement Count

ID: 18-05553-002
City: Torrance

Day: Tuesday
Date: 08/28/2018

PEAK HOURS		COUNT PERIODS
08:00 AM - 09:00 AM	AM	07:00 AM - 09:00 AM
NONE	NOON	NONE
05:00 PM - 06:00 PM	PM	04:00 PM - 06:00 PM

Hamilton Ave — SOUTHBOUND

AM	0	95	331	0	313	AM
NOON	0	0	0	0	0	NOON
PM	0	169	634	0	163	PM
	0	2	0	0		

I-110 SB Ramps — EASTBOUND

AM	NOON	PM	
0	0	0	
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
AM	NOON	PM	

I-110 SB Ramps — WESTBOUND

	PM	NOON	AM
1	102	0	234
0	0	0	0
2	296	0	764
0	0	0	0
	1168	0	441
	PM	NOON	AM

CONTROL

3-Way Stop (NB/SB/WB)

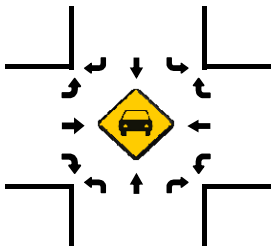
	AM	NOON	PM
TEV	1613	0	1796
PHF	0.95		0.90

NORTHBOUND

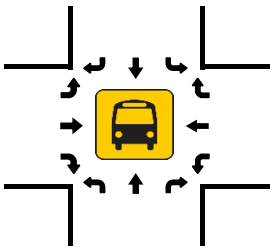
		0	0	1	1	
PM	465	0	0	61	534	PM
NOON	0	0	0	0	0	NOON
AM	859	0	0	79	110	AM

Hamilton Ave

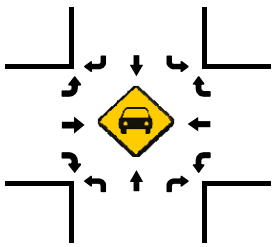
Total Vehicles (AM)



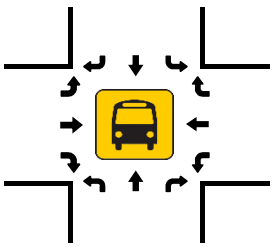
Total Vehicles (AM)



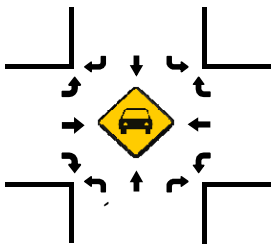
Total Vehicles (NOON)



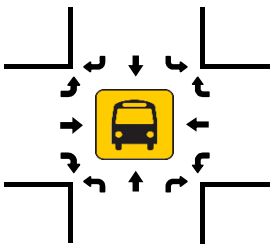
Total Vehicles (NOON)



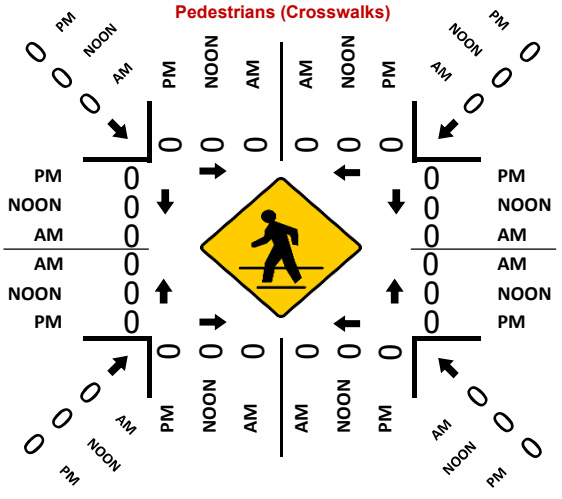
Total Vehicles (PM)



Total Vehicles (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Figueroa St & Del Amo Blvd
City: Carson
Control: Signalized

Project ID: 18-05553-003
Date: 8/28/2018

Total

NS/EW Streets:	Figueroa St				Figueroa St				Del Amo Blvd				Del Amo Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	1	2	1	0	1	2	0	0	1	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	27	131	52	0	9	41	68	0	14	43	20	2	31	174	29	1	642
7:15 AM	36	124	49	0	5	69	80	0	10	49	16	0	25	248	41	0	752
7:30 AM	32	133	69	0	14	103	96	0	12	60	10	0	23	219	24	0	795
7:45 AM	54	173	94	0	12	80	111	0	16	75	23	0	31	235	26	0	930
8:00 AM	55	153	84	0	10	79	71	1	15	66	25	1	34	194	27	0	815
8:15 AM	50	182	73	2	13	85	71	0	12	59	19	0	17	172	20	0	775
8:30 AM	46	133	63	0	9	45	70	0	16	51	23	0	31	197	18	0	702
8:45 AM	32	111	50	0	8	37	56	1	15	69	23	0	20	153	13	0	588
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	332	1140	534	2	80	539	623	2	110	472	159	3	212	1592	198	1	5999
APPROACH %'s :	16.53%	56.77%	26.59%	0.10%	6.43%	43.33%	50.08%	0.16%	14.78%	63.44%	21.37%	0.40%	10.58%	79.48%	9.89%	0.05%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	191	641	320	2	49	347	349	1	55	260	77	1	105	820	97	0	3315
PEAK HR FACTOR :	0.868	0.880	0.851	0.250	0.875	0.842	0.786	0.250	0.859	0.867	0.770	0.250	0.772	0.872	0.898	0.000	0.891
	0.899				0.876				0.862				0.875				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	1	2	1	0	1	2	0	0	1	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	12	105	69	0	40	110	45	2	17	186	40	1	29	161	23	0	840
4:15 PM	22	82	68	1	23	107	49	1	18	179	35	0	31	129	21	0	766
4:30 PM	18	116	75	0	32	108	54	1	13	178	28	0	34	123	21	0	801
4:45 PM	23	96	67	3	49	131	56	1	20	199	35	0	30	133	27	0	870
5:00 PM	12	114	90	0	38	178	58	0	19	200	35	0	51	120	19	0	934
5:15 PM	15	113	78	1	43	221	50	0	16	209	31	0	50	150	24	0	1001
5:30 PM	8	84	72	1	53	163	42	1	13	199	31	0	62	130	17	0	876
5:45 PM	4	75	71	0	37	181	57	0	12	220	18	0	45	125	12	0	857
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	114	785	590	6	315	1199	411	6	128	1570	253	1	332	1071	164	0	6945
APPROACH %'s :	7.63%	52.51%	39.46%	0.40%	16.31%	62.09%	21.28%	0.31%	6.56%	80.43%	12.96%	0.05%	21.19%	68.35%	10.47%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	58	407	307	5	183	693	206	2	68	807	132	0	193	533	87	0	3681
PEAK HR FACTOR :	0.630	0.893	0.853	0.417	0.863	0.784	0.888	0.500	0.850	0.965	0.943	0.000	0.778	0.888	0.806	0.000	0.919
	0.899				0.863				0.983				0.907				

Prepared by National Data & Surveying Services

Figueroa St & Del Amo Blvd

Peak Hour Turning Movement Count

ID: 18-05553-003
City: Carson

Day: Tuesday
Date: 08/28/2018

PEAK HOURS

AM	07:30 AM - 08:30 AM
NOON	NONE
PM	04:45 PM - 05:45 PM

COUNT PERIODS

AM	07:00 AM - 09:00 AM
NOON	NONE
PM	04:00 PM - 06:00 PM

SOUTHBOUND — Figueroa St

AM	349	347	49	1	794	AM
NOON	0	0	0	0	0	NOON
PM	206	693	183	2	564	PM
	1	2	1	0		

EASTBOUND — Del Amo Blvd

AM	NOON	PM	
1361	0	797	⇦
1	0	0	0
55	0	68	1
260	0	807	2
77	0	132	0
AM	NOON	PM	

WESTBOUND — Del Amo Blvd

PM	NOON	AM	
87	0	97	1
533	0	820	2
193	0	105	1
0	0	0	0
1297	0	629	⇨
PM	NOON	AM	

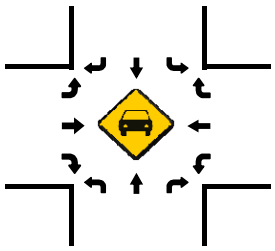
CONTROL: Signalized

TEV	3315 AM	0 NOON	3681 PM
PHF	0.89		0.92

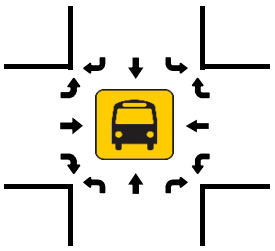
NORTHBOUND — Figueroa St

PM	1023	5	58	407	307	PM
NOON	0	0	0	0	0	NOON
AM	531	2	191	641	320	AM
		0	1	2	1	

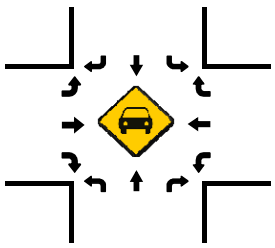
Total Vehicles (AM)



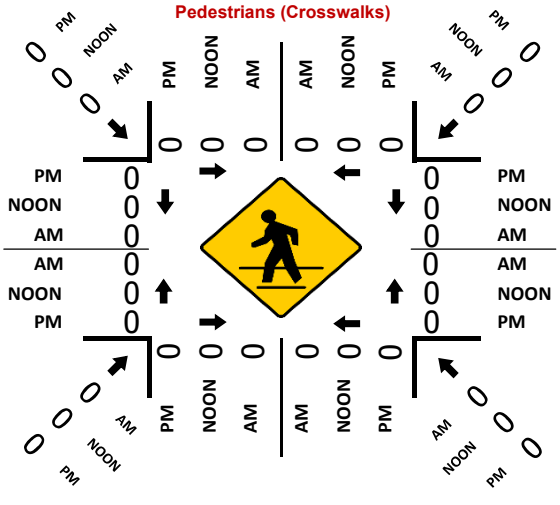
Total Vehicles (AM)



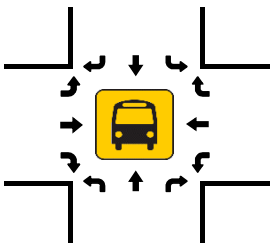
Total Vehicles (NOON)



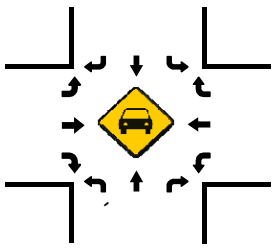
Pedestrians (Crosswalks)



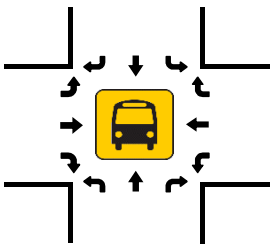
Total Vehicles (NOON)



Total Vehicles (PM)



Total Vehicles (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Figueroa St & I-110 NB Ramps
City: Carson
Control: Signalized

Project ID: 18-05553-004
Date: 8/28/2018

Total

NS/EW Streets:	Figueroa St				Figueroa St				I-110 NB Ramps				I-110 NB Ramps				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	2	0	0	0	2	1	0	1.5	0	0.5	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	167	107	0	0	0	64	29	0	102	0	44	0	0	0	0	0	513
7:15 AM	154	117	0	0	0	89	24	0	103	0	45	0	0	0	0	0	532
7:30 AM	168	154	0	0	0	111	32	0	78	0	42	0	0	0	0	0	585
7:45 AM	179	157	0	0	0	99	32	0	165	0	68	0	0	0	0	0	700
8:00 AM	163	136	0	0	0	97	35	0	166	0	57	0	0	0	0	0	654
8:15 AM	147	152	0	0	0	104	27	0	140	0	56	0	0	0	0	0	626
8:30 AM	140	145	0	0	0	59	31	0	111	0	62	0	0	0	0	0	548
8:45 AM	155	87	0	0	0	55	32	0	108	0	61	0	0	0	0	0	498
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1273	1055	0	0	0	678	242	0	973	0	435	0	0	0	0	0	4656
APPROACH %'s :	54.68%	45.32%	0.00%	0.00%	0.00%	73.70%	26.30%	0.00%	69.11%	0.00%	30.89%	0.00%					
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	657	599	0	0	0	411	126	0	549	0	223	0	0	0	0	0	2565
PEAK HR FACTOR :	0.918	0.954	0.000	0.000	0.000	0.926	0.900	0.000	0.827	0.000	0.820	0.000	0.000	0.000	0.000	0.000	0.916
	0.935				0.939				0.828								

NS/EW Streets:	Figueroa St				Figueroa St				I-110 NB Ramps				I-110 NB Ramps				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	2	0	0	0	2	1	0	1.5	0	0.5	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	152	89	0	0	0	131	44	1	91	0	30	0	0	0	0	0	538
4:15 PM	106	71	0	1	0	140	36	0	101	0	26	0	0	0	0	0	481
4:30 PM	155	115	0	0	0	120	49	0	85	0	35	1	0	0	0	0	560
4:45 PM	132	106	0	0	0	164	32	0	95	0	45	0	0	0	0	0	574
5:00 PM	117	115	0	0	0	224	38	0	93	0	31	0	0	0	0	0	618
5:15 PM	126	117	0	0	0	277	37	0	91	0	34	0	0	0	0	0	682
5:30 PM	124	82	0	0	0	223	40	0	78	0	28	0	0	0	0	0	575
5:45 PM	126	70	0	0	0	208	37	0	77	0	28	0	0	0	0	0	546
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1038	765	0	1	0	1487	313	1	711	0	257	1	0	0	0	0	4574
APPROACH %'s :	57.54%	42.41%	0.00%	0.06%	0.00%	82.57%	17.38%	0.06%	73.37%	0.00%	26.52%	0.10%					
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	499	420	0	0	0	888	147	0	357	0	138	0	0	0	0	0	2449
PEAK HR FACTOR :	0.945	0.897	0.000	0.000	0.000	0.801	0.919	0.000	0.939	0.000	0.767	0.000	0.000	0.000	0.000	0.000	0.898
	0.945				0.824				0.884								

Prepared by National Data & Surveying Services

Figueroa St & I-110 NB Ramps

Peak Hour Turning Movement Count

ID: 18-05553-004
City: Carson

Day: Tuesday
Date: 08/28/2018

PEAK HOURS

AM	07:30 AM - 08:30 AM
NOON	NONE
PM	04:45 PM - 05:45 PM

COUNT PERIODS

AM	07:00 AM - 09:00 AM
NOON	NONE
PM	04:00 PM - 06:00 PM

SOUTHBOUND — Figueroa St

AM	126	411	0	0	1148	AM
NOON	0	0	0	0	0	NOON
PM	147	888	0	0	777	PM
	1	2	0	0		

EASTBOUND — I-110 NB Ramps

AM	NOON	PM		
783	0	646		
0	0	0	0	
549	0	357	1.5	
0	0	0	0	
223	0	138	0.5	
AM	NOON	PM		

WESTBOUND — I-110 NB Ramps

0		0	0	PM
0		0	0	NOON
0		0	0	AM
0		0	0	AM
		0	0	NOON
		0	0	PM

CONTROL

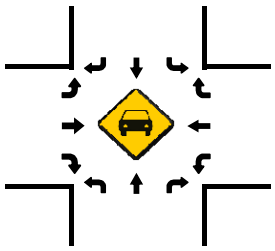
Signalized

TEV	2565	0	2450
	AM	NOON	PM
PHF	0.92		0.90

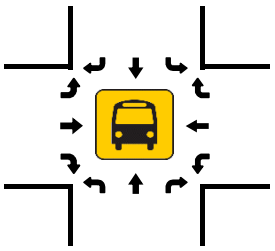
NORTHBOUND — Figueroa St

PM	1027	1	499	420	0	PM
NOON	0	0	0	0	0	NOON
AM	634	0	657	599	0	AM
		0	2	2	0	

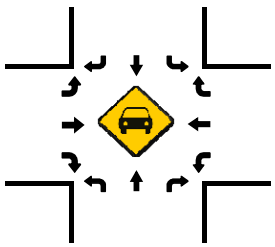
Total Vehicles (AM)



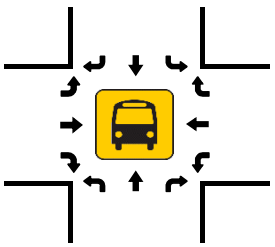
Total Vehicles (AM)



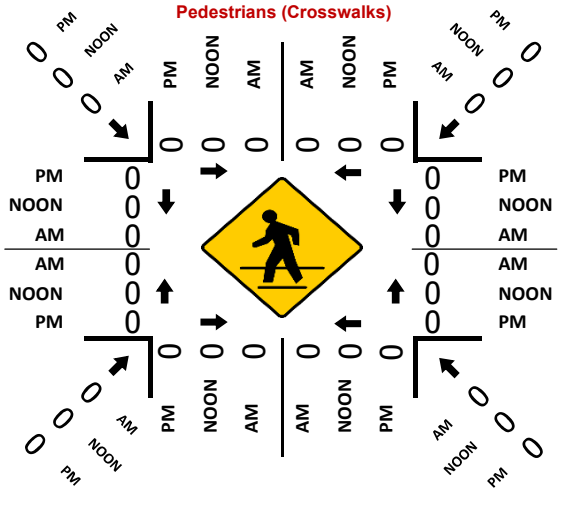
Total Vehicles (NOON)



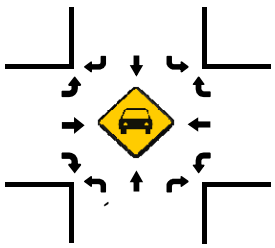
Total Vehicles (NOON)



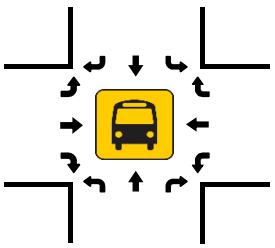
Pedestrians (Crosswalks)



Total Vehicles (PM)



Total Vehicles (PM)



Turning Movement Count Report AM

Location ID: 2
North/South: Albertoni Street
East/West: SR-91 ramps

Date: 09/27/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	46	0	24	13	104	0	0	0	0	0	48	66	301
7:15	36	0	44	23	120	1	0	0	0	0	50	52	326
7:30	37	0	43	16	133	0	0	0	0	0	70	68	367
7:45	70	0	72	18	136	0	0	0	0	0	72	63	431
8:00	63	0	105	30	118	0	0	0	0	0	95	77	488
8:15	56	0	58	24	108	0	0	0	0	0	91	67	404
8:30	51	0	59	15	97	0	0	0	0	0	62	71	355
8:45	64	0	59	9	98	0	0	0	0	0	63	49	342
Total Volume:	423	0	464	148	914	1	0	0	0	0	551	513	3014
Approach %	48%	0%	52%	14%	86%	0%	0%	0%	0%	0%	52%	48%	
Peak Hr Begin:	7:30												
PHV	226	0	278	88	495	0	0	0	0	0	328	275	1690
PHF	0.750			0.946			0.000			0.876			0.866

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report PM

Location ID: 2
North/South: Albertoni Street
East/West: SR-91 ramps

Date: 09/27/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	72	0	97	15	100	0	0	0	0	0	209	49	542
16:15	97	0	118	19	81	0	0	0	0	0	235	43	593
16:30	67	0	98	13	94	1	0	0	0	0	176	65	514
16:45	68	0	113	15	76	0	0	0	0	0	195	57	524
17:00	39	0	102	9	92	0	0	0	0	0	211	73	526
17:15	53	0	109	18	108	0	0	0	0	0	191	58	537
17:30	56	0	123	10	111	0	0	0	0	0	187	57	544
17:45	52	0	88	3	67	0	0	0	0	0	146	48	404
Total Volume:	504	0	848	102	729	1	0	0	0	0	1550	450	4184
Approach %	37%	0%	63%	12%	88%	0%	0%	0%	0%	0%	78%	23%	
Peak Hr Begin:	16:00												
PHV	304	0	426	62	351	1	0	0	0	0	815	214	2173
PHF	0.849			0.900			0.000			0.925			0.916

Prepared by City Count, LLC. (www.citycount.com)

Pedestrian/Bicycle Count Report

Location ID: 2
North/South: Albertoni Street
East/West: SR-91 ramps

Date: 09/27/18
City: Carson, CA

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
7:00	1	0	0	0	0	0	0	0
7:15	1	0	1	0	0	0	0	0
7:30	1	2	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	0
8:00	0	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0
8:45	1	0	0	0	0	0	0	0

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
16:00	1	0	0	0	0	0	0	0
16:15	2	1	0	0	0	0	0	0
16:30	1	0	0	0	0	0	0	0
16:45	3	1	0	0	0	0	0	0
17:00	0	1	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	2	0	0	0	0	0	0	0

Turning Movement Count Report AM

Location ID: 1
North/South: Main Street
East/West: Broadway Street

Date: 09/27/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	3	113	0	0	0	0	0	98	44	38	0	0	296
7:15	4	142	0	0	0	0	0	88	53	38	0	0	325
7:30	0	246	0	0	0	0	0	144	57	49	0	0	496
7:45	1	170	0	0	0	0	0	189	84	50	0	0	494
8:00	2	140	0	0	0	0	0	163	59	43	0	0	407
8:15	2	124	0	0	0	0	0	172	69	42	0	0	409
8:30	2	93	0	0	0	0	0	132	48	37	0	0	312
8:45	3	85	0	0	0	0	0	97	41	37	0	0	263
Total Volume:	17	1113	0	0	0	0	0	1083	455	334	0	0	3002
Approach %	2%	98%	0%	0%	0%	0%	0%	70%	30%	100%	0%	0%	

Peak Hr Begin:	7:30												
PHV	5	680	0	0	0	0	0	668	269	184	0	0	1806
PHF	0.696			0.000			0.858			0.920			0.910

Turning Movement Count Report PM

Location ID: 1
North/South: Main Street
East/West: Broadway Street

Date: 09/27/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	1	169	2	0	0	0	0	149	56	119	0	0	496
16:15	2	145	0	0	0	0	0	147	30	98	0	0	422
16:30	4	187	0	0	0	0	0	151	54	123	0	0	519
16:45	4	150	0	0	0	0	0	186	61	102	0	0	503
17:00	6	187	0	0	0	0	0	171	48	148	0	0	560
17:15	4	159	0	0	0	0	0	170	52	117	0	0	502
17:30	3	161	0	0	0	0	0	166	43	127	0	0	500
17:45	0	143	0	0	0	0	0	128	33	98	0	0	402
Total Volume:	24	1301	2	0	0	0	0	1268	377	932	0	0	3904
Approach %	2%	98%	0%	0%	0%	0%	0%	77%	23%	100%	0%	0%	
Peak Hr Begin:	16:30												
PHV	18	683	0	0	0	0	0	678	215	490	0	0	2084
PHF	0.908			0.000			0.904			0.828			0.930

Pedestrian/Bicycle Count Report

Location ID: 1
North/South: Main Street
East/West: Broadway Street

Date: 09/27/18
City: Carson, CA

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
7:00	0	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	0
8:00	0	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0

Turning Movement Count Report AM

Location ID: 1
North/South: Main Street
East/West: MLK Jr Street

Date: 05/05/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
8:00	0	41	8	7	0	17	18	42	0	0	0	0	133
8:15	0	38	16	7	0	12	28	48	0	0	0	0	149
8:30	0	53	17	8	0	8	21	39	0	0	0	0	146
8:45	0	47	9	6	0	18	21	45	0	0	0	0	146
9:00	0	36	13	15	0	19	17	38	0	0	0	0	138
9:15	0	41	11	7	0	16	18	33	0	0	0	0	126
9:30	0	37	14	10	0	13	16	42	0	0	0	0	132
9:45	0	59	15	12	0	14	17	40	0	0	0	0	157
Total Volume:	0	352	103	72	0	117	156	327	0	0	0	0	1127
Approach %	0%	77%	23%	38%	0%	62%	32%	68%	0%	0%	0%	0%	
Peak Hr Begin:	8:15												
PHV	0	174	55	36	0	57	87	170	0	0	0	0	579
PHF	0.818			0.684			0.845			0.000			0.971

Turning Movement Count Report PM

Location ID: 1
North/South: Main Street
East/West: MLK Jr Street

Date: 05/05/18
City: Bakersfield, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	0	60	18	25	0	14	21	60	0	0	0	0	198
16:15	0	60	23	19	0	13	27	55	0	0	0	0	197
16:30	0	46	20	13	0	21	23	45	0	0	0	0	168
16:45	0	44	19	17	0	22	28	46	0	0	0	0	176
17:00	0	46	13	17	0	13	26	58	0	0	0	0	173
17:15	0	45	19	12	0	17	23	56	0	0	0	0	172
17:30	0	43	16	9	0	18	18	64	0	0	0	0	168
17:45	0	37	21	14	0	11	20	54	0	0	0	0	157
Total Volume:	0	381	149	126	0	129	186	438	0	0	0	0	1409
Approach %	0%	72%	28%	49%	0%	51%	30%	70%	0%	0%	0%	0%	
Peak Hr Begin:	16:00												
PHV	0	210	80	74	0	70	99	206	0	0	0	0	739
PHF	0.873			0.923			0.930			0.000			0.933

Pedestrian/Bicycle Count Report

Location ID: 1
North/South: Main Street
East/West: MLK Jr Street

Date: 05/05/18
City: Bakersfield, CA

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
8:00	0	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0
9:00	0	0	0	0	0	0	0	0
9:15	0	0	0	0	0	0	0	0
9:30	0	0	0	0	0	0	0	0
9:45	0	0	0	0	0	0	0	0

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	1	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	2	0	0	0	0	0

Turning Movement Count Report Mid-Day

Location ID: 4
North/South: Main Street
East/West: I-405 NB Ramps

Date: 09/22/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
11:00	10	117	0	13	11	13	0	71	2	0	0	0	237
11:15	9	91	0	36	22	18	0	62	3	0	0	0	241
11:30	8	99	0	15	35	15	0	74	3	0	0	0	249
11:45	4	101	2	26	11	19	0	83	3	0	0	0	249
12:00	5	104	1	24	24	9	0	77	5	0	0	0	249
12:15	4	95	0	25	15	8	0	69	3	0	0	0	219
12:30	13	108	0	24	18	19	0	73	5	0	0	0	260
12:45	6	89	0	17	18	12	0	68	6	0	0	0	216
Total Volume:	59	804	3	180	154	113	0	577	30	0	0	0	1920
Approach %	7%	93%	0%	40%	34%	25%	0%	95%	5%	0%	0%	0%	
Peak Hr Begin:	11:15												
PHV	26	395	3	101	92	61	0	296	14	0	0	0	988
PHF	0.964			0.836			0.901			0.000			0.992

Pedestrian/Bicycle Count Report

Location ID: 4
North/South: Main Street
East/West: I-405 NB Ramps

Date: 09/22/18
City: Carson, CA

	North		*East*		*South*		*West*	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
11:00	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0
12:45	0	0	0	1	0	0	0	0

Turning Movement Count Report Mid-Day

Location ID: 5
North/South: Main Street
East/West: I-405 SB Ramps

Date: 09/22/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
11:00	0	91	37	0	0	0	13	64	0	1	20	6	232
11:15	0	82	25	0	0	0	8	58	0	10	17	0	200
11:30	0	100	13	0	0	0	6	74	0	5	14	8	220
11:45	0	97	22	0	0	0	7	76	0	6	18	7	233
12:00	0	87	23	0	0	0	13	85	0	3	19	1	231
12:15	0	72	31	0	0	0	19	72	0	2	26	2	224
12:30	0	110	16	0	0	0	25	66	0	4	14	9	244
12:45	0	83	15	0	0	0	15	72	1	4	19	3	212
Total Volume:	0	722	182	0	0	0	106	567	1	35	147	36	1796
Approach %	0%	80%	20%	0%	0%	0%	16%	84%	0%	16%	67%	17%	
Peak Hr Begin:	11:45												
PHV	0	366	92	0	0	0	64	299	0	15	77	19	932
PHF	0.909			0.000			0.926			0.895			0.955

Pedestrian/Bicycle Count Report

Location ID: 5
North/South: Main Street
East/West: I-405 SB Ramps

Date: 09/22/18
City: Carson, CA

	North		*East*		*South*		*West*	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
11:00	0	0	0	0	0	0	0	1
11:15	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	1
12:30	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0

Turning Movement Count Report AM

Location ID: 6
North/South: Avalon Blvd
East/West: SR-91 WB On-Ramp

Date: 05/05/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
8:00	0	104	27	40	0	44	34	70	1	0	0	0	320
8:15	0	120	29	40	0	44	33	60	0	0	0	0	326
8:30	0	111	33	45	0	51	41	66	1	0	0	0	348
8:45	0	134	41	56	0	50	45	102	0	0	0	0	428
9:00	0	114	26	51	0	53	43	83	0	0	0	0	370
9:15	0	157	26	48	0	39	54	87	1	0	0	0	412
9:30	0	130	36	54	0	47	50	112	1	0	0	0	430
9:45	0	152	43	41	0	48	58	93	2	0	0	0	437
Total Volume:	0	1022	261	375	0	376	358	673	6	0	0	0	3071
Approach %	0%	80%	20%	50%	0%	50%	35%	65%	1%	0%	0%	0%	
Peak Hr Begin:	9:00												
PHV	0	553	131	194	0	187	205	375	4	0	0	0	1649
PHF	0.877			0.916			0.896			0.000			0.943

Turning Movement Count Report PM

Location ID: 6
North/South: Avalon Blvd
East/West: SR-91 WB On-Ramp

Date: 05/05/18
City: Bakersfield, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	0	168	21	55	0	85	37	164	0	0	0	0	530
16:15	0	155	25	49	0	99	55	142	1	0	0	0	526
16:30	0	144	27	54	0	76	58	139	1	0	0	0	499
16:45	0	173	25	63	0	96	51	170	2	0	0	0	580
17:00	0	158	19	57	0	85	69	164	0	0	0	0	552
17:15	0	148	27	34	0	83	63	156	1	0	0	0	512
17:30	0	143	35	50	0	96	55	140	3	0	0	0	522
17:45	0	121	23	52	0	73	64	144	0	0	0	0	477
Total Volume:	0	1210	202	414	0	693	452	1219	8	0	0	0	4198
Approach %	0%	86%	14%	37%	0%	63%	27%	73%	0%	0%	0%	0%	
Peak Hr Begin:	16:45												
PHV	0	622	106	204	0	360	238	630	6	0	0	0	2166
PHF	0.919			0.887			0.938			0.000			0.934

Pedestrian/Bicycle Count Report

Location ID: 6
North/South: Avalon Blvd
East/West: SR-91 WB On-Ramp

Date: 05/05/18
City: Bakersfield, CA

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
8:00	0	0	0	0	0	0	0	0
8:15	0	0	1	1	0	0	0	0
8:30	0	0	0	0	0	0	0	0
8:45	0	0	0	1	0	0	0	0
9:00	0	0	2	1	0	0	0	0
9:15	0	0	0	0	0	0	0	0
9:30	0	0	0	0	0	0	0	0
9:45	0	0	0	1	0	0	0	0

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
16:00	0	0	0	0	1	0	0	0
16:15	0	0	1	1	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	1	0	0	0	0
17:00	0	0	2	1	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	1	0	0	0	0

Turning Movement Count Report AM

Location ID: 11
North/South: Avalon Blvd
East/West: MLK Jr Street

Date: 05/05/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
8:00	6	106	0	0	0	0	0	112	7	6	0	9	246
8:15	9	127	0	0	0	0	0	125	9	11	0	12	293
8:30	7	147	0	0	0	0	0	140	14	10	0	8	326
8:45	8	163	1	0	0	0	0	158	8	8	0	3	349
9:00	14	167	0	0	0	0	0	137	16	14	0	6	354
9:15	8	174	0	0	0	0	0	116	11	19	0	4	332
9:30	11	186	0	0	0	0	0	146	8	8	0	12	371
9:45	7	169	0	0	0	0	0	142	13	17	0	1	349
Total Volume:	70	1239	1	0	0	0	0	1076	86	93	0	55	2620
Approach %	5%	95%	0%	0%	0%	0%	0%	93%	7%	63%	0%	37%	

Peak Hr Begin:	8:45												
PHV	41	690	1	0	0	0	0	557	43	49	0	25	1406
PHF	0.929			0.000			0.904			0.804			0.947

Turning Movement Count Report PM

Location ID: 11
North/South: Avalon Blvd
East/West: MLK Jr Street

Date: 05/05/18
City: Bakersfield, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	11	192	0	0	0	0	0	212	23	14	0	20	472
16:15	11	220	0	0	0	0	0	218	19	20	0	18	506
16:30	13	211	0	0	0	0	0	251	17	19	0	14	525
16:45	13	211	0	0	0	0	0	202	15	18	0	21	480
17:00	10	218	0	0	0	0	0	222	21	17	0	15	503
17:15	5	200	0	0	0	0	0	238	20	17	0	27	507
17:30	13	179	1	0	0	0	0	229	11	12	0	9	454
17:45	8	204	0	0	0	0	0	203	21	22	0	11	469
Total Volume:	84	1635	1	0	0	0	0	1775	147	139	0	135	3916
Approach %	5%	95%	0%	0%	0%	0%	0%	92%	8%	51%	0%	49%	
Peak Hr Begin:	16:30												
PHV	41	840	0	0	0	0	0	913	73	71	0	77	2015
PHF	0.966			0.000			0.920			0.841			0.960

Pedestrian/Bicycle Count Report

Location ID: 11
North/South: Avalon Blvd
East/West: MLK Jr Street

Date: 05/05/18
City: Bakersfield, CA

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
8:00	0	0	0	0	0	0	0	0
8:15	0	0	0	0	1	0	1	0
8:30	0	0	0	0	0	0	0	1
8:45	0	0	0	0	1	0	0	0
9:00	0	0	0	0	0	0	0	0
9:15	0	0	0	0	0	0	0	0
9:30	0	0	0	0	0	1	0	0
9:45	0	0	0	0	0	0	0	0

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	1
17:45	0	0	0	0	0	0	0	0

Turning Movement Count Report AM

Location ID: 12
North/South: Avalon Blvd
East/West: Elsmere Drive

Date: 05/05/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
8:00	0	107	5	5	0	10	4	107	0	0	0	0	238
8:15	0	130	3	3	0	10	3	128	0	0	0	0	277
8:30	0	153	6	5	0	1	6	150	0	0	0	0	321
8:45	0	171	2	7	0	11	6	158	1	0	0	0	356
9:00	0	164	7	8	0	10	7	147	1	0	0	0	344
9:15	0	180	12	7	0	11	4	127	0	0	0	0	341
9:30	0	177	6	5	0	9	7	141	0	0	0	0	345
9:45	0	187	7	8	0	14	15	147	1	0	0	0	379
Total Volume:	0	1269	48	48	0	76	52	1105	3	0	0	0	2601
Approach %	0%	96%	4%	39%	0%	61%	4%	95%	0%	0%	0%	0%	
Peak Hr Begin:	9:00												
PHV	0	708	32	28	0	44	33	562	2	0	0	0	1409
PHF	0.954			0.818			0.916			0.000			0.929

Turning Movement Count Report PM

Location ID: 13
North/South: Avalon Blvd
East/West: Turmont Street

Date: 05/05/18
City: Bakersfield, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	0	216	9	7	0	16	6	220	1	0	0	0	475
16:15	0	217	13	3	0	11	12	227	0	0	0	0	483
16:30	0	221	11	10	0	7	11	250	0	0	0	0	510
16:45	0	220	12	7	0	10	12	204	0	0	0	0	465
17:00	0	219	17	6	0	11	13	246	0	0	0	0	512
17:15	0	188	8	9	0	9	13	255	1	0	0	0	483
17:30	0	205	5	4	0	12	10	222	0	0	0	0	458
17:45	0	217	10	10	0	10	13	220	1	0	0	0	481
Total Volume:	0	1703	85	56	0	86	90	1844	3	0	0	0	3867
Approach %	0%	95%	5%	39%	0%	61%	5%	95%	0%	0%	0%	0%	
Peak Hr Begin:	16:15												
PHV	0	877	53	26	0	39	48	927	0	0	0	0	1970
PHF	0.985			0.956			0.934			0.000			0.962

Prepared by City Count, LLC. (www.citycount.com)

Pedestrian/Bicycle Count Report

Location ID: 13
North/South: Avalon Blvd
East/West: Turmont Street

Date: 05/05/18
City: Bakersfield, CA

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
8:00	0	0	3	1	1	0	0	0
8:15	0	0	6	1	0	0	0	0
8:30	0	0	0	0	0	0	0	0
8:45	0	0	3	1	0	0	0	0
9:00	0	0	0	0	0	0	0	0
9:15	0	0	1	0	0	1	0	0
9:30	0	0	1	0	0	0	0	0
9:45	0	0	2	2	0	0	0	0

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
16:00	0	0	2	0	1	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	1	2	1	0	0	0
16:45	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	1	0	0	0	0
17:30	0	0	1	0	2	0	0	0
17:45	0	0	0	0	0	1	0	0

Turning Movement Count Report AM

Location ID: 13
North/South: Avalon Blvd
East/West: Turmont Street

Date: 05/05/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
8:00	0	113	1	6	0	28	13	96	5	0	0	0	262
8:15	0	143	3	7	0	14	33	129	7	0	0	0	336
8:30	0	148	5	10	0	32	24	146	3	0	0	0	368
8:45	0	177	7	16	0	36	26	143	10	0	0	0	415
9:00	0	162	5	6	0	32	33	144	6	0	0	0	388
9:15	0	201	7	6	0	33	24	120	6	0	0	0	397
9:30	0	182	7	3	0	34	30	155	7	0	0	0	418
9:45	0	194	6	9	0	30	41	160	6	0	0	0	446
Total Volume:	0	1320	41	63	0	239	224	1093	50	0	0	0	3030
Approach %	0%	97%	3%	21%	0%	79%	16%	80%	4%	0%	0%	0%	
Peak Hr Begin:	9:00												
PHV	0	739	25	24	0	129	128	579	25	0	0	0	1649
PHF	0.918			0.981			0.884			0.000			0.924

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report PM

Location ID: 12
North/South: Avalon Blvd
East/West: Elsmere Drive

Date: 05/05/18
City: Bakersfield, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	0	205	11	4	0	32	42	204	3	0	0	0	501
16:15	0	234	9	11	0	25	49	251	6	0	0	0	585
16:30	0	225	5	10	0	28	52	236	4	0	0	0	560
16:45	0	216	15	5	0	28	40	222	7	0	0	0	533
17:00	0	201	16	11	0	16	43	237	8	0	0	0	532
17:15	0	218	8	7	0	18	36	260	1	0	0	0	548
17:30	0	191	11	10	0	18	38	203	10	0	0	0	481
17:45	0	206	15	12	0	22	45	251	6	0	0	0	557
Total Volume:	0	1696	90	70	0	187	345	1864	45	0	0	0	4297
Approach %	0%	95%	5%	27%	0%	73%	15%	83%	2%	0%	0%	0%	
Peak Hr Begin:	16:15												
PHV	0	876	45	37	0	97	184	946	25	0	0	0	2210
PHF	0.948			0.882			0.944			0.000			0.944

Pedestrian/Bicycle Count Report

Location ID: 12
North/South: Avalon Blvd
East/West: Elsmere Drive

Date: 05/05/18
City: Bakersfield, CA

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
8:00	0	0	3	1	0	0	0	0
8:15	0	0	1	2	0	0	0	0
8:30	0	0	0	0	0	0	0	0
8:45	0	0	3	1	0	0	0	0
9:00	0	0	4	0	0	0	0	0
9:15	0	0	3	0	0	0	0	0
9:30	0	0	1	0	0	0	0	0
9:45	0	0	4	1	0	0	0	0

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
16:00	0	0	1	0	0	0	0	0
16:15	0	0	5	0	0	0	0	0
16:30	0	0	0	2	0	0	0	0
16:45	0	0	2	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	2	0	0	0	0
17:30	0	1	1	0	0	0	0	0
17:45	1	0	0	2	0	0	0	0

Turning Movement Count Report AM

Location ID: 14
North/South: Avalon Blvd
East/West: Del Amo Blvd

Date: 05/05/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
8:00	17	108	28	10	55	61	13	79	8	9	39	15	442
8:15	25	104	38	18	57	54	15	110	12	9	60	39	541
8:30	29	120	42	22	47	57	35	119	18	22	48	35	594
8:45	27	148	43	9	75	53	25	114	13	14	49	38	608
9:00	29	134	45	14	51	55	25	143	25	22	38	33	614
9:15	36	142	55	22	59	62	32	101	23	24	66	16	638
9:30	27	154	52	24	72	58	31	142	22	20	68	30	700
9:45	30	118	63	25	74	57	27	144	20	15	49	29	651
Total Volume:	220	1028	366	144	490	457	203	952	141	135	417	235	4788
Approach %	14%	64%	23%	13%	45%	42%	16%	73%	11%	17%	53%	30%	
Peak Hr Begin:	9:00												
PHV	122	548	215	85	256	232	115	530	90	81	221	108	2603
PHF	0.950			0.918			0.942			0.869			0.930

Turning Movement Count Report PM

Location ID: 14
North/South: Avalon Blvd
East/West: Del Amo Blvd

Date: 05/05/18
City: Bakersfield, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	29	148	54	30	70	45	40	165	18	32	73	34	738
16:15	39	172	62	30	60	48	44	205	23	18	74	32	807
16:30	33	158	68	18	58	44	35	231	17	32	96	33	823
16:45	24	159	57	27	71	55	41	178	33	16	57	37	755
17:00	30	174	54	31	66	55	30	203	16	20	84	37	800
17:15	29	148	57	27	69	51	44	223	26	7	55	30	766
17:30	34	136	61	18	77	32	35	210	14	27	72	42	758
17:45	23	138	47	25	45	58	31	196	22	22	74	43	724
Total Volume:	241	1233	460	206	516	388	300	1611	169	174	585	288	6171
Approach %	12%	64%	24%	19%	46%	35%	14%	77%	8%	17%	56%	28%	
Peak Hr Begin:	16:15												
PHV	126	663	241	106	255	202	150	817	89	86	311	139	3185
PHF	0.943			0.920			0.933			0.832			0.967

Pedestrian/Bicycle Count Report

Location ID: 14
North/South: Avalon Blvd
East/West: Del Amo Blvd

Date: 05/05/18
City: Bakersfield, CA

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
8:00	1	0	4	1	1	0	0	0
8:15	1	0	5	1	1	0	0	0
8:30	2	0	5	0	2	0	1	0
8:45	1	0	4	0	1	0	1	0
9:00	1	0	12	0	3	1	2	0
9:15	3	1	4	1	2	0	2	0
9:30	0	0	4	1	3	0	0	0
9:45	1	0	5	0	0	0	1	0

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
16:00	2	0	7	0	1	0	1	0
16:15	0	0	10	3	1	0	1	0
16:30	0	0	6	1	2	0	2	0
16:45	0	0	4	1	0	0	0	0
17:00	2	0	4	0	1	0	1	0
17:15	1	0	9	2	4	0	0	1
17:30	1	0	9	0	2	0	0	1
17:45	0	0	5	1	2	0	1	0

Turning Movement Count Report AM

Location ID: 15
North/South: Avalon Blvd
East/West: I-405 NB Ramps

Date: 05/05/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
8:00	70	128	0	38	1	24	0	160	56	0	0	0	477
8:15	53	145	0	60	0	15	0	182	93	0	0	0	548
8:30	56	149	0	76	0	17	0	170	86	0	0	0	554
8:45	61	167	0	71	0	20	0	260	87	0	0	0	666
9:00	59	159	0	65	0	15	0	209	74	0	0	0	581
9:15	69	167	0	67	0	18	0	244	73	0	0	0	638
9:30	78	171	0	63	0	17	0	248	79	0	0	0	656
9:45	71	151	0	105	0	20	0	273	63	0	0	0	683
Total Volume:	517	1237	0	545	1	146	0	1746	611	0	0	0	4803
Approach %	29%	71%	0%	79%	0%	21%	0%	74%	26%	0%	0%	0%	
Peak Hr Begin:	9:00												
PHV	277	648	0	300	0	70	0	974	289	0	0	0	2558
PHF	0.929			0.740			0.940			0.000			0.936

Turning Movement Count Report PM

Location ID: 15
North/South: Avalon Blvd
East/West: I-405 NB Ramps

Date: 05/05/18
City: Bakersfield, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	119	260	0	103	0	25	0	293	68	0	0	0	868
16:15	156	260	0	83	0	27	0	298	62	0	0	0	886
16:30	151	226	0	106	0	22	0	309	62	0	0	0	876
16:45	147	250	0	77	0	18	0	289	83	0	0	0	864
17:00	146	234	0	87	0	19	0	294	83	0	0	0	863
17:15	139	256	0	80	1	19	0	278	83	0	0	0	856
17:30	128	205	0	94	0	13	0	275	68	0	0	0	783
17:45	121	203	0	74	0	17	0	231	65	0	0	0	711
Total Volume:	1107	1894	0	704	1	160	0	2267	574	0	0	0	6707
Approach %	37%	63%	0%	81%	0%	18%	0%	80%	20%	0%	0%	0%	
Peak Hr Begin:	16:00												
PHV	573	996	0	369	0	92	0	1189	275	0	0	0	3494
PHF	0.943			0.900			0.984			0.000			0.986

Pedestrian/Bicycle Count Report

Location ID: 15
North/South: Avalon Blvd
East/West: I-405 NB Ramps

Date: 05/05/18
City: Bakersfield, CA

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
8:00	0	0	2	1	1	0	0	0
8:15	0	0	0	0	1	0	0	0
8:30	0	0	1	0	2	0	1	0
8:45	0	0	2	0	1	0	1	0
9:00	0	0	2	0	3	0	2	0
9:15	0	0	2	1	2	0	0	0
9:30	0	0	0	0	3	0	0	0
9:45	0	0	0	0	0	0	0	0

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
16:00	0	0	2	0	1	0	0	0
16:15	0	0	0	2	1	0	0	0
16:30	0	0	1	1	2	0	2	0
16:45	0	0	1	0	0	0	0	0
17:00	0	0	1	0	1	0	0	0
17:15	0	0	2	0	4	0	0	0
17:30	0	0	0	1	2	0	0	0
17:45	0	0	3	0	2	0	0	0

Turning Movement Count Report AM

Location ID: 16
North/South: Avalon Blvd
East/West: I-405 SB Ramps

Date: 05/05/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
8:00	27	101	0	0	0	0	15	132	0	82	1	91	449
8:15	42	136	0	0	0	0	15	156	0	78	0	103	530
8:30	23	123	0	0	0	0	20	132	0	66	1	127	492
8:45	34	133	0	0	0	0	18	194	0	88	0	138	605
9:00	42	139	0	0	0	0	24	190	0	95	1	108	599
9:15	46	150	0	0	0	0	22	210	0	74	1	95	598
9:30	35	135	0	0	0	0	31	193	0	78	2	116	590
9:45	37	147	0	0	0	0	38	230	0	63	1	115	631
Total Volume:	286	1064	0	0	0	0	183	1437	0	624	7	893	4494
Approach %	21%	79%	0%	0%	0%	0%	11%	89%	0%	41%	0%	59%	
Peak Hr Begin:	9:00												
PHV	160	571	0	0	0	0	115	823	0	310	5	434	2418
PHF	0.932			0.000			0.875			0.918			0.958

Turning Movement Count Report PM

Location ID: 16
North/South: Avalon Blvd
East/West: I-405 SB Ramps

Date: 05/05/18
City: Bakersfield, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	83	194	0	0	0	0	28	238	0	97	0	127	767
16:15	71	192	0	0	0	0	21	227	0	83	1	122	717
16:30	71	218	0	0	0	0	26	245	0	100	4	147	811
16:45	59	188	0	0	0	0	40	202	0	77	5	136	707
17:00	66	195	0	0	0	0	29	261	0	85	1	143	780
17:15	86	184	0	0	0	0	26	212	0	82	4	138	732
17:30	63	169	0	0	0	0	22	207	0	88	1	121	671
17:45	63	169	0	0	0	0	25	203	0	73	2	124	659
Total Volume:	562	1509	0	0	0	0	217	1795	0	685	18	1058	5844
Approach %	27%	73%	0%	0%	0%	0%	11%	89%	0%	39%	1%	60%	
Peak Hr Begin:	16:30												
PHV	282	785	0	0	0	0	121	920	0	344	14	564	3030
PHF	0.923			0.000			0.897			0.918			0.934

Pedestrian/Bicycle Count Report

Location ID: 16
North/South: Avalon Blvd
East/West: I-405 SB Ramps

Date: 05/05/18
City: Bakersfield, CA

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
8:00	0	0	2	2	1	0	0	0
8:15	0	0	0	0	1	0	0	0
8:30	0	0	0	0	2	0	1	0
8:45	0	0	0	0	1	0	1	1
9:00	0	0	3	1	3	0	2	0
9:15	0	0	3	1	2	0	0	0
9:30	0	0	1	1	3	0	0	0
9:45	0	0	2	0	0	0	0	0

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
16:00	0	0	2	1	1	0	0	0
16:15	0	0	2	2	1	1	0	0
16:30	0	0	1	1	2	0	2	0
16:45	0	0	1	0	0	0	0	0
17:00	0	0	0	0	1	0	0	0
17:15	0	0	0	0	4	0	0	0
17:30	0	0	2	1	2	0	0	0
17:45	0	0	2	0	2	0	0	0

Turning Movement Count Report AM

Location ID: 17
North/South: Main Street
East/West: WB SR-91 Ramps

Date: 05/05/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
8:00	0	39	18	27	0	28	13	34	0	0	0	0	159
8:15	0	39	9	34	0	22	21	53	1	0	0	0	179
8:30	0	52	13	33	0	30	22	45	0	0	0	0	195
8:45	0	33	9	27	0	28	28	34	1	0	0	0	160
9:00	0	35	11	26	0	16	28	36	0	0	0	0	152
9:15	0	48	12	33	0	25	34	38	0	0	0	0	190
9:30	0	46	17	26	0	30	31	50	1	0	0	0	201
9:45	0	51	8	31	0	34	28	45	0	0	0	0	197
Total Volume:	0	343	97	237	0	213	205	335	3	0	0	0	1433
Approach %	0%	78%	22%	53%	0%	47%	38%	62%	1%	0%	0%	0%	
Peak Hr Begin:	9:00												
PHV	0	180	48	116	0	105	121	169	1	0	0	0	740
PHF	0.905			0.850			0.887			0.000			0.920

Turning Movement Count Report PM

Location ID: 17
North/South: Main Street
East/West: WB SR-91 Ramps

Date: 05/05/18
City: Bakersfield, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	0	54	8	45	0	27	26	29	0	0	0	0	189
16:15	0	57	9	13	0	22	22	47	0	0	0	0	170
16:30	0	42	8	21	0	23	19	59	0	0	0	0	172
16:45	0	36	8	21	0	29	23	37	1	0	0	0	155
17:00	0	44	5	36	0	21	22	60	1	0	0	0	189
17:15	0	44	9	20	0	22	20	51	1	0	0	0	167
17:30	0	43	6	17	0	20	18	44	1	0	0	0	149
17:45	0	34	7	42	0	16	20	31	0	0	0	0	150
Total Volume:	0	354	60	215	0	180	170	358	4	0	0	0	1341
Approach %	0%	86%	14%	54%	0%	46%	32%	67%	1%	0%	0%	0%	
Peak Hr Begin:	16:00												
PHV	0	189	33	100	0	101	90	172	1	0	0	0	686
PHF	0.841			0.698			0.843			0.000			0.907

Pedestrian/Bicycle Count Report

Location ID: 17
North/South: Main Street
East/West: WB SR-91 Ramps

Date: 05/05/18
City: Bakersfield, CA

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
8:00	0	0	0	0	1	0	0	0
8:15	0	0	0	0	1	0	0	0
8:30	0	0	0	0	2	0	1	0
8:45	0	0	0	0	1	0	1	0
9:00	0	0	0	0	3	0	2	0
9:15	0	0	0	0	2	0	0	0
9:30	0	0	0	0	3	0	0	0
9:45	0	0	0	0	0	0	0	0

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
16:00	0	0	0	0	1	0	0	0
16:15	0	0	0	0	1	0	0	0
16:30	0	0	0	0	2	0	2	0
16:45	0	0	1	0	1	0	0	0
17:00	0	0	0	0	1	0	0	0
17:15	0	0	0	0	4	0	0	0
17:30	0	0	0	2	2	0	0	0
17:45	0	0	0	0	2	0	0	0

Turning Movement Count Report Midday

Location ID: 1
North/South: I-110 NB On-Ramp
East/West: 190th Street

Date: 10/06/18
City: Gardena, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
11:00	0	0	0	36	98	0	0	0	0	0	148	80	362
11:15	0	0	0	38	118	1	0	0	0	0	155	85	397
11:30	0	0	0	44	100	2	0	0	0	0	162	85	393
11:45	0	0	0	47	126	2	0	0	0	0	163	89	427
12:00	0	0	0	44	111	0	0	0	0	0	150	98	403
12:15	0	0	0	48	96	0	0	0	0	0	160	104	408
12:30	0	0	0	31	107	0	0	0	0	0	121	92	351
12:45	0	0	0	40	78	0	0	0	0	0	147	100	365
Total Volume:	0	0	0	328	834	5	0	0	0	0	1206	733	3106
Approach %	0%	0%	0%	28%	71%	0%	0%	0%	0%	0%	62%	38%	
Peak Hr Begin:	11:30												
PHV	0	0	0	183	433	4	0	0	0	0	635	376	1631
PHF	0.000			0.886			0.000			0.957			0.955

Pedestrian/Bicycle Count Report

Location ID: 1
North/South: I-110 NB On-Ramp
East/West: 190th Street

Date: 10/06/18
City: Gardena, CA

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
11:00	0	1	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0
12:00	0	3	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0

Turning Movement Count Report Mid-Day

Location ID: 6
North/South: SR-110 SB Off-Ramp
East/West: W 190th Street

Date: 09/29/18
City: Gardena, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
11:00	59	0	43	0	101	0	0	0	0	0	178	0	381
11:15	63	0	29	0	85	0	0	0	0	0	211	0	388
11:30	65	0	43	0	102	0	0	0	0	0	174	0	384
11:45	59	0	35	0	122	0	0	0	0	0	180	0	396
12:00	56	0	35	0	137	0	0	0	0	0	210	0	438
12:15	77	0	37	0	121	0	0	0	0	0	235	0	470
12:30	90	0	58	0	116	0	0	0	0	0	220	0	484
12:45	132	0	102	0	98	0	0	0	0	0	235	0	567
Total Volume:	601	0	382	0	882	0	0	0	0	0	1643	0	3508
Approach %	61%	0%	39%	0%	100%	0%	0%	0%	0%	0%	100%	0%	
Peak Hr Begin:	12:00												
PHV	355	0	232	0	472	0	0	0	0	0	900	0	1959
PHF	0.627			0.861			0.000			0.957			0.864

Pedestrian/Bicycle Count Report

Location ID: 6
North/South: SR-110 SB Off-Ramp
East/West: W 190th Street

Date: 09/29/18
City: Gardena, CA

	North		*East*		*South*		*West*	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
11:00	0	0	0	0	0	0	0	0
11:15	0	1	0	0	0	0	0	0
11:30	0	2	0	0	0	0	0	0
11:45	1	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	2	0
12:30	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0

Turning Movement Count Report Mid-Day

Location ID: 1
North/South: Albertoni Street
East/West: SR-91 ramps

Date: 09/22/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
11:00	25	0	58	22	63	0	0	0	0	0	64	92	324
11:15	31	0	63	14	69	0	0	0	0	0	59	39	275
11:30	28	0	48	13	78	0	0	0	0	0	62	58	287
11:45	22	0	49	25	57	0	0	0	0	0	52	57	262
12:00	28	0	59	12	70	0	0	0	0	0	71	72	312
12:15	33	0	64	18	68	1	0	0	0	0	64	67	315
12:30	24	0	38	20	78	0	0	0	0	0	61	74	295
12:45	33	0	47	17	67	0	0	0	0	0	67	55	286
Total Volume:	224	0	426	141	550	1	0	0	0	0	500	514	2356
Approach %	34%	0%	66%	20%	79%	0%	0%	0%	0%	0%	49%	51%	
Peak Hr Begin:	12:00												
PHV	118	0	208	67	283	1	0	0	0	0	263	268	1208
PHF	0.840			0.895			0.000			0.928			0.959

Prepared by City Count, LLC. (www.citycount.com)

Pedestrian/Bicycle Count Report

Location ID: 1
North/South: Albertoni Street
East/West: SR-91 ramps

Date: 09/22/18
City: Carson, CA

	North		*East*		*South*		*West*	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
11:00	1	0	0	0	0	0	0	0
11:15	1	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0
11:45	5	0	0	0	0	0	0	0
12:00	2	1	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0
12:45	1	0	0	0	0	0	0	0

Appendix D

Level of Service Worksheets

Existing Conditions 2018
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Main St & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.415
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0 1	0	1	0 2	0 0	0	0 1!	0 0	1	0 1!	0 0
Volume Module:												
Base Vol:	4	455	136	68	540	0	1	0	3	159	0	119
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	455	136	68	540	0	1	0	3	159	0	119
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	455	136	68	540	0	1	0	3	159	0	119
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	455	136	68	540	0	1	0	3	159	0	119
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	4	455	136	68	540	0	1	0	3	159	0	119
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	1.53	0.46	1.00	2.00	0.00	0.25	0.00	0.75	1.14	0.00	0.86
Final Sat.:	22	2447	731	1600	3200	0	400	0	1200	1830	0	1370
Capacity Analysis Module:												
Vol/Sat:	0.00	0.19	0.19	0.04	0.17	0.00	0.00	0.00	0.00	0.09	0.00	0.09
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Main St & 1-405 NB off

Cycle (sec):	100	Critical Vol./Cap.(X):	0.567
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	0 1	0 1	0
Volume Module:												
Base Vol:	28	657	0	0	724	70	0	0	0	87	324	232
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	28	657	0	0	724	70	0	0	0	87	324	232
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	28	657	0	0	724	70	0	0	0	87	324	232
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	28	657	0	0	724	70	0	0	0	87	324	232
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	28	657	0	0	724	70	0	0	0	87	324	232
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.82	0.18	0.00	0.00	0.00	0.27	1.01	0.72
Final Sat.:	1600	3200	0	0	2918	282	0	0	0	433	1612	1155
Capacity Analysis Module:												
Vol/Sat:	0.02	0.21	0.00	0.00	0.25	0.25	0.00	0.00	0.00	0.05	0.20	0.20
Crit Moves:	****				****						****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Main St & I-405 SB On-Ramp

Cycle (sec):	100	Critical Vol./Cap.(X):	0.452
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	1 0	0 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	599	52	146	723	0	29	71	21	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	599	52	146	723	0	29	71	21	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	599	52	146	723	0	29	71	21	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	599	52	146	723	0	29	71	21	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	599	52	146	723	0	29	71	21	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.84	0.16	1.00	2.00	0.00	1.00	0.77	0.23	0.00	0.00	0.00
Final Sat.:	0	2944	256	1600	3200	0	1600	1235	365	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.20	0.09	0.23	0.00	0.02	0.06	0.06	0.00	0.00	0.00
Crit Moves:		****		****				****				

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Main St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.665
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	73	549	309	39	515	143	119	579	34	231	918	49
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	73	549	309	39	515	143	119	579	34	231	918	49
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	73	549	309	39	515	143	119	579	34	231	918	49
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	73	549	309	39	515	143	119	579	34	231	918	49
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	73	549	309	39	515	143	119	579	34	231	918	49
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.28	0.72	1.00	1.57	0.43	1.00	2.83	0.17	1.00	2.85	0.15
Final Sat.:	1600	2048	1152	1600	2505	695	1600	4534	266	1600	4557	243
Capacity Analysis Module:												
Vol/Sat:	0.05	0.27	0.27	0.02	0.21	0.21	0.07	0.13	0.13	0.14	0.20	0.20
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Main St & Torrance Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.622
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	1 0	2 0	1	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	309	610	7	13	538	231	278	18	181	13	54	32
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	309	610	7	13	538	231	278	18	181	13	54	32
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	309	610	7	13	538	231	278	18	181	13	54	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	309	610	7	13	538	231	278	18	181	13	54	32
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	309	610	7	13	538	231	278	18	181	13	54	32
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.98	0.02	1.00	2.00	1.00	0.94	0.06	1.00	0.13	0.55	0.32
Final Sat.:	2880	3164	36	1600	3200	1600	1503	97	1600	210	873	517
Capacity Analysis Module:												
Vol/Sat:	0.11	0.19	0.19	0.01	0.17	0.14	0.19	0.18	0.11	0.06	0.06	0.06
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Avalon Blvd & Artesia Blvd/SR 90

Cycle (sec):	100	Critical Vol./Cap.(X):	0.546
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	912	160	177	1088	0	0	0	0	334	0	600
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	912	160	177	1088	0	0	0	0	334	0	600
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	912	160	177	1088	0	0	0	0	334	0	600
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	912	160	177	1088	0	0	0	0	334	0	600
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	912	160	177	1088	0	0	0	0	334	0	600
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.07	xxxx	1.93
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	1716	0	3084
Capacity Analysis Module:												
Vol/Sat:	0.00	0.19	0.10	0.06	0.23	0.00	0.00	0.00	0.00	0.19	0.00	0.19
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Avalon Blvd & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.647
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	1 0	1 1	1	1 0	1 1	1
Volume Module:												
Base Vol:	181	715	150	339	656	376	181	127	311	80	20	235
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	181	715	150	339	656	376	181	127	311	80	20	235
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	181	715	150	339	656	376	181	127	311	80	20	235
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	181	715	150	339	656	376	181	127	311	80	20	235
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	181	715	150	339	656	376	181	127	311	80	20	235
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3200	1600	1600	1600	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.11	0.15	0.09	0.21	0.21	0.24	0.11	0.08	0.10	0.05	0.01	0.07
Crit Moves:		****		****			****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Avalon Blvd & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.590
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	136	685	201	379	685	78	85	497	81	97	416	221
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	136	685	201	379	685	78	85	497	81	97	416	221
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	136	685	201	379	685	78	85	497	81	97	416	221
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	136	685	201	379	685	78	85	497	81	97	416	221
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	136	685	201	379	685	78	85	497	81	97	416	221
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.69	0.31	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	4309	491	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.14	0.13	0.13	0.16	0.16	0.05	0.16	0.05	0.06	0.13	0.14
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Avalon Blvd & 184th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.392
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	0 0	1! 0	0	1 0	1! 0	1
Volume Module:												
Base Vol:	19	967	62	37	830	8	57	0	45	8	0	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	19	967	62	37	830	8	57	0	45	8	0	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	19	967	62	37	830	8	57	0	45	8	0	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	967	62	37	830	8	57	0	45	8	0	11
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	19	967	62	37	830	8	57	0	45	8	0	11
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.97	0.03	0.56	0.00	0.44	1.26	0.00	1.74
Final Sat.:	1600	4800	1600	1600	4754	46	894	0	706	2021	0	2779
Capacity Analysis Module:												
Vol/Sat:	0.01	0.20	0.04	0.02	0.17	0.17	0.06	0.00	0.06	0.00	0.00	0.00
Crit Moves:		****		****					****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Avalon Blvd & University Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.667
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0	1 0	0 0	1
Volume Module:												
Base Vol:	0	829	476	289	594	0	0	0	0	247	0	271
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	829	476	289	594	0	0	0	0	247	0	271
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	829	476	289	594	0	0	0	0	247	0	271
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	829	476	289	594	0	0	0	0	247	0	271
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	829	476	289	594	0	0	0	0	247	0	271
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.30	0.10	0.12	0.00	0.00	0.00	0.00	0.15	0.00	0.17
Crit Moves:			****	****								****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Avalon Blvd & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.418
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2 1	0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	117	1204	0	0	727	100	107	0	55	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	117	1204	0	0	727	100	107	0	55	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	117	1204	0	0	727	100	107	0	55	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	117	1204	0	0	727	100	107	0	55	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	117	1204	0	0	727	100	107	0	55	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.64	0.36	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4220	580	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.25	0.00	0.00	0.17	0.17	0.07	0.00	0.03	0.00	0.00	0.00
Crit Moves:		****		****			****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Avalon Blvd & Elsmere Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.459
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2 1	0	1 0	3 0	0	0 0	0 0	0 0	1 0	0 0	1
Volume Module:												
Base Vol:	0	1268	63	34	755	0	0	0	0	96	0	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1268	63	34	755	0	0	0	0	96	0	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1268	63	34	755	0	0	0	0	96	0	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1268	63	34	755	0	0	0	0	96	0	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1268	63	34	755	0	0	0	0	96	0	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.86	0.14	1.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4573	227	1600	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.28	0.28	0.02	0.16	0.00	0.00	0.00	0.00	0.06	0.00	0.03
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Avalon Blvd & Turmont St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.520
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 1	0	1 0	3 0	0	0 0	0 0	0 0	1 0	0 0	1
Volume Module:												
Base Vol:	20	1217	114	68	790	0	0	0	0	160	0	102
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	1217	114	68	790	0	0	0	0	160	0	102
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	1217	114	68	790	0	0	0	0	160	0	102
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	1217	114	68	790	0	0	0	0	160	0	102
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	1217	114	68	790	0	0	0	0	160	0	102
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.74	0.26	1.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	4389	411	1600	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.28	0.28	0.04	0.16	0.00	0.00	0.00	0.00	0.10	0.00	0.06
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Avalon Blvd & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.797
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	66	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	145	842	134	186	621	246	257	534	85	184	849	94
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	145	842	134	186	621	246	257	534	85	184	849	94
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	145	842	134	186	621	246	257	534	85	184	849	94
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	145	842	134	186	621	246	257	534	85	184	849	94
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	145	842	134	186	621	246	257	534	85	184	849	94
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.15	0.85	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	3200	3438	1362	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.18	0.08	0.06	0.18	0.18	0.16	0.17	0.05	0.12	0.27	0.06
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Avalon Blvd & I-405 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.470
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 1	0 0	1
Volume Module:												
Base Vol:	414	1117	0	0	769	257	0	0	0	66	0	420
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	414	1117	0	0	769	257	0	0	0	66	0	420
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	414	1117	0	0	769	0	0	0	0	66	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	414	1117	0	0	769	0	0	0	0	66	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	414	1117	0	0	769	0	0	0	0	66	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	2880	3200	0	0	4800	1600	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.14	0.35	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.02	0.00	0.00
Crit Moves:		****								****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avalon Blvd & I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.602
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	2	0 1	2 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	1015	100	0	570	268	442	13	554	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1015	100	0	570	268	442	13	554	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	1015	100	0	570	268	442	13	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1015	100	0	570	268	442	13	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	0	1015	100	0	570	268	442	13	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.82	0.18	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2913	287	0	3200	1600	2880	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.35	0.35	0.00	0.18	0.17	0.15	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****		****			****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 Main St & SR 91 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.624
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	0	533	93	65	486	0	0	0	0	461	0	405
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	533	93	65	486	0	0	0	0	461	0	405
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	533	93	65	486	0	0	0	0	461	0	405
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	533	93	65	486	0	0	0	0	461	0	405
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	533	93	65	486	0	0	0	0	461	0	405
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.70	0.30	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	2725	475	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.20	0.04	0.15	0.00	0.00	0.00	0.00	0.29	0.00	0.25
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.688
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	111	360	121	152	416	277	32	302	73	113	419	226
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	111	360	121	152	416	277	32	302	73	113	419	226
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	111	360	121	152	416	277	32	302	73	113	419	226
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	111	360	121	152	416	277	32	302	73	113	419	226
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	111	360	121	152	416	277	32	302	73	113	419	226
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.50	0.50	1.00	1.20	0.80	1.00	1.61	0.39	1.00	1.30	0.70
Final Sat.:	1600	2395	805	1600	1921	1279	1600	2577	623	1600	2079	1121
Capacity Analysis Module:												
Vol/Sat:	0.07	0.15	0.15	0.10	0.22	0.22	0.02	0.12	0.12	0.07	0.20	0.20
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Main St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.525
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	50	394	117	62	357	95	68	408	32	184	529	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	394	117	62	357	95	68	408	32	184	529	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	394	117	62	357	95	68	408	32	184	529	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	394	117	62	357	95	68	408	32	184	529	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	394	117	62	357	95	68	408	32	184	529	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.58	0.42	1.00	1.85	0.15	1.00	1.63	0.37
Final Sat.:	1600	3200	1600	1600	2527	673	1600	2967	233	1600	2608	592
Capacity Analysis Module:												
Vol/Sat:	0.03	0.12	0.07	0.04	0.14	0.14	0.04	0.14	0.14	0.12	0.20	0.20
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 Figueroa St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.605
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	151	569	89	43	400	120	151	458	144	60	498	72
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	151	569	89	43	400	120	151	458	144	60	498	72
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	151	569	89	43	400	120	151	458	144	60	498	72
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	151	569	89	43	400	120	151	458	144	60	498	72
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	151	569	89	43	400	120	151	458	144	60	498	72
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.73	0.27	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.75	0.25
Final Sat.:	1600	2767	433	1600	3200	1600	1600	3200	1600	1600	2796	404
Capacity Analysis Module:												
Vol/Sat:	0.09	0.21	0.21	0.03	0.13	0.08	0.09	0.14	0.09	0.04	0.18	0.18
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 I-110 NB On-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.353
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	2	0	1	1	0	1	0	2	0	1
Volume Module:												
Base Vol:	0	0	0	0	0	0	158	810	0	0	555	198
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	158	810	0	0	555	198
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	158	810	0	0	555	198
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	158	810	0	0	555	198
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	158	810	0	0	555	198
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	1600	0	0	0	0	3200	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.25	0.00	0.00	0.17	0.12
Crit Moves:								****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 I-110 SB Off-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.769
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	0 0	2 0	0	0 0	3 0	0
Volume Module:												
Base Vol:	0	0	0	228	0	718	0	704	0	0	580	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	228	0	718	0	704	0	0	580	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	228	0	718	0	704	0	0	580	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	228	0	718	0	704	0	0	580	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	228	0	718	0	704	0	0	580	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.14	0.00	0.45	0.00	0.22	0.00	0.00	0.12	0.00
Crit Moves:						****		****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 Central Ave & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.799
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	66	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	2 0	2 0	1	2 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	126	530	23	194	734	673	221	203	123	23	277	117
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	126	530	23	194	734	673	221	203	123	23	277	117
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	126	530	23	194	734	673	221	203	123	23	277	117
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	126	530	23	194	734	673	221	203	123	23	277	117
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	126	530	23	194	734	673	221	203	123	23	277	117
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.25	0.75	1.00	1.41	0.59
Final Sat.:	1600	3200	1600	2880	3200	1600	2880	1993	1207	1600	2250	950
Capacity Analysis Module:												
Vol/Sat:	0.08	0.17	0.01	0.07	0.23	0.42	0.08	0.10	0.10	0.01	0.12	0.12
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 Hamilton Ave & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.546
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	58	130	66	50	63	14	37	263	80	377	706	352
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	58	130	66	50	63	14	37	263	80	377	706	352
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	58	130	66	50	63	14	37	263	80	377	706	352
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	58	130	66	50	63	14	37	263	80	377	706	352
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	58	130	66	50	63	14	37	263	80	377	706	352
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.33	0.67	1.00	1.64	0.36	1.00	1.53	0.47	1.00	1.33	0.67
Final Sat.:	1600	2122	1078	1600	2618	582	1600	2454	746	1600	2135	1065
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.06	0.03	0.02	0.02	0.02	0.11	0.11	0.24	0.33	0.33
Crit Moves:		****		****			****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #25 Hamilton Ave & I-110 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.668
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Ignore			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 0	1	0 1	1 0	0	0 0	0 0	0 0	1 0	1! 0	0
Volume Module:												
Base Vol:	0	79	110	331	95	0	0	0	0	764	0	234
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	79	110	331	95	0	0	0	0	764	0	234
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	79	0	331	95	0	0	0	0	764	0	234
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	79	0	331	95	0	0	0	0	764	0	234
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	79	0	331	95	0	0	0	0	764	0	234
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.53	0.00	0.47
Final Sat.:	0	1600	1600	1600	1600	0	0	0	0	2450	0	750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.05	0.00	0.21	0.06	0.00	0.00	0.00	0.00	0.31	0.00	0.31
Crit Moves:		****		****								****

Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	All-way stop	Delay (sec / veh):	40.0
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.976

Intersection Setup

Name	Hamilton Ave		Hamilton Ave		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Ave		Hamilton Ave		I-110 SB Ramps	
Base Volume Input [veh/h]	79	110	331	95	764	234
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	79	110	331	95	764	234
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	28	83	24	191	59
Total Analysis Volume [veh/h]	79	110	331	95	764	234
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	455	502	451	483	511	555
Degree of Utilization, x	0.17	0.22	0.73	0.20	0.98	0.90

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.62	0.83	5.93	0.73	12.95	10.60
95th-Percentile Queue Length [ft]	15.54	20.74	148.13	18.14	323.64	264.99
Approach Delay [s/veh]	12.05		25.71		51.35	
Approach LOS	B		D		F	
Intersection Delay [s/veh]	39.97					
Intersection LOS	E					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 Figueroa St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.730
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	193	641	320	50	347	349	56	260	77	105	820	97
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	193	641	320	50	347	349	56	260	77	105	820	97
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	193	641	320	50	347	349	56	260	77	105	820	97
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	193	641	320	50	347	349	56	260	77	105	820	97
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	193	641	320	50	347	349	56	260	77	105	820	97
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.54	0.46	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	2469	731	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.12	0.20	0.20	0.03	0.11	0.22	0.04	0.11	0.11	0.07	0.26	0.06
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 Figueroa St & I-110 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.698
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	2 0	1	1 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	657	599	0	0	411	126	549	0	223	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	657	599	0	0	411	126	549	0	223	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	657	599	0	0	411	126	549	0	223	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	657	599	0	0	411	126	549	0	223	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	657	599	0	0	411	126	549	0	223	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	2.00	1.00	1.42	0.00	0.58	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	3200	1600	2276	0	924	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.23	0.19	0.00	0.00	0.13	0.08	0.24	0.00	0.24	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 SR 91 EB Ramps & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.551
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Street Name:	SR 91 EB Ramps						Albertoni St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	2 0	2 0	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	0	278	0	226	275	328	0	0	495	88
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	278	0	226	275	328	0	0	495	88
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	278	0	226	275	328	0	0	495	88
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	278	0	226	275	328	0	0	495	88
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	278	0	226	275	328	0	0	495	88
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.70	0.30
Final Sat.:	0	0	0	1600	0	1600	2880	3200	0	0	2717	483
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.17	0.00	0.14	0.10	0.10	0.00	0.00	0.18	0.18
Crit Moves:				****			****				****	

Intersection Level Of Service Report
Intersection 29: Main Street & Broadway

Control Type:	Two-way stop	Delay (sec / veh):	17.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.650

Intersection Setup

Name	Main Street		Main Street		Broadway	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Main Street		Main Street		Broadway	
Base Volume Input [veh/h]	269	668	680	5	0	184
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	269	668	680	5	0	184
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	67	167	170	1	0	46
Total Analysis Volume [veh/h]	269	668	680	5	0	184
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.65	0.75	0.42	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	17.83	11.39	7.80	0.00	0.00	0.00
Movement LOS	C	B	A	A		A
95th-Percentile Queue Length [veh]	1.39	1.74	0.79	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	34.74	43.50	19.78	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	13.24		7.75		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	9.81					
Intersection LOS	C					

Existing Conditions 2018
Afternoon Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Main St & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.524
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0 1	0	1	0 2	0 0	0	0 0	0 1	1	0 1!	0 0
Volume Module:												
Base Vol:	2	518	236	215	658	0	0	0	3	95	0	77
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	518	236	215	658	0	0	0	3	95	0	77
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	518	236	215	658	0	0	0	3	95	0	77
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	518	236	215	658	0	0	0	3	95	0	77
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	518	236	215	658	0	0	0	3	95	0	77
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	1.37	0.62	1.00	2.00	0.00	0.00	0.00	1.00	1.10	0.00	0.90
Final Sat.:	8	2193	999	1600	3200	0	0	0	1600	1767	0	1433
Capacity Analysis Module:												
Vol/Sat:	0.00	0.24	0.24	0.13	0.21	0.00	0.00	0.00	0.00	0.05	0.00	0.05
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Main St & 1-405 NB off

Cycle (sec):	100	Critical Vol./Cap.(X):	0.675
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	0 1	0 1	0
Volume Module:												
Base Vol:	21	674	0	0	1235	92	0	0	0	61	121	236
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	674	0	0	1235	92	0	0	0	61	121	236
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	21	674	0	0	1235	92	0	0	0	61	121	236
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	21	674	0	0	1235	92	0	0	0	61	121	236
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	21	674	0	0	1235	92	0	0	0	61	121	236
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.86	0.14	0.00	0.00	0.00	0.29	0.71	1.00
Final Sat.:	1600	3200	0	0	2978	222	0	0	0	467	1133	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.21	0.00	0.00	0.41	0.41	0.00	0.00	0.00	0.04	0.11	0.15
Crit Moves:	****				****							****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Main St & I-405 SB On-Ramp

Cycle (sec):	100	Critical Vol./Cap.(X):	0.702
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	1 0	0 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	639	109	272	1025	0	61	276	42	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	639	109	272	1025	0	61	276	42	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	639	109	272	1025	0	61	276	42	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	639	109	272	1025	0	61	276	42	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	639	109	272	1025	0	61	276	42	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.71	0.29	1.00	2.00	0.00	1.00	0.87	0.13	0.00	0.00	0.00
Final Sat.:	0	2734	466	1600	3200	0	1600	1389	211	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.23	0.23	0.17	0.32	0.00	0.04	0.20	0.20	0.00	0.00	0.00
Crit Moves:		****		****				****				

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Main St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.864
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	85	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	35	457	342	100	821	174	218	1092	102	292	699	61
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	35	457	342	100	821	174	218	1092	102	292	699	61
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	35	457	342	100	821	174	218	1092	102	292	699	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	457	342	100	821	174	218	1092	102	292	699	61
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	35	457	342	100	821	174	218	1092	102	292	699	61
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.14	0.86	1.00	1.65	0.35	1.00	2.74	0.26	1.00	2.76	0.24
Final Sat.:	1600	1830	1370	1600	2640	560	1600	4390	410	1600	4415	385
Capacity Analysis Module:												
Vol/Sat:	0.02	0.25	0.25	0.06	0.31	0.31	0.14	0.25	0.25	0.18	0.16	0.16
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Main St & Torrance Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.754
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	1 0	2 0	1	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	186	430	11	38	829	309	379	57	478	6	17	27
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	186	430	11	38	829	309	379	57	478	6	17	27
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	186	430	11	38	829	309	379	57	478	6	17	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	186	430	11	38	829	309	379	57	478	6	17	27
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	186	430	11	38	829	309	379	57	478	6	17	27
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.95	0.05	1.00	2.00	1.00	0.87	0.13	1.00	0.12	0.34	0.54
Final Sat.:	2880	3120	80	1600	3200	1600	1391	209	1600	192	544	864
Capacity Analysis Module:												
Vol/Sat:	0.06	0.14	0.14	0.02	0.26	0.19	0.27	0.27	0.30	0.03	0.03	0.03
Crit Moves:	****				****				****		****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Avalon Blvd & Artesia Blvd/SR 90

Cycle (sec):	100	Critical Vol./Cap.(X):	0.570
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	1180	217	163	1058	0	0	0	0	354	0	449
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1180	217	163	1058	0	0	0	0	354	0	449
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1180	217	163	1058	0	0	0	0	354	0	449
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1180	217	163	1058	0	0	0	0	354	0	449
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1180	217	163	1058	0	0	0	0	354	0	449
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.32	0.01	1.67
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	2116	0	2684
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.14	0.06	0.22	0.00	0.00	0.00	0.00	0.17	0.00	0.17
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Avalon Blvd & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.843
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	78	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	1 0	1 1	1	1 0	1 1	1
Volume Module:												
Base Vol:	243	897	147	261	891	263	287	787	586	103	21	189
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	243	897	147	261	891	263	287	787	586	103	21	189
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	243	897	147	261	891	263	287	787	586	103	21	189
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	243	897	147	261	891	263	287	787	586	103	21	189
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	243	897	147	261	891	263	287	787	586	103	21	189
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.32	0.68	1.00	1.72	1.28	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3706	1094	1600	2751	2049	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.15	0.19	0.09	0.16	0.24	0.24	0.18	0.29	0.29	0.06	0.01	0.06
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Avalon Blvd & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.736
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	149	828	227	427	980	85	114	637	142	186	685	353
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	149	828	227	427	980	85	114	637	142	186	685	353
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	149	828	227	427	980	85	114	637	142	186	685	353
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	149	828	227	427	980	85	114	637	142	186	685	353
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	149	828	227	427	980	85	114	637	142	186	685	353
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.76	0.24	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	4417	383	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.17	0.14	0.15	0.22	0.22	0.07	0.20	0.09	0.12	0.21	0.22
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Avalon Blvd & 184th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.469
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	0 0	1! 0	0	1 0	1! 0	1
Volume Module:												
Base Vol:	34	1080	39	55	1227	33	73	0	30	50	0	48
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	34	1080	39	55	1227	33	73	0	30	50	0	48
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	34	1080	39	55	1227	33	73	0	30	50	0	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	34	1080	39	55	1227	33	73	0	30	50	0	48
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	34	1080	39	55	1227	33	73	0	30	50	0	48
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.92	0.08	0.71	0.00	0.29	1.53	xxxx	1.47
Final Sat.:	1600	4800	1600	1600	4674	126	1134	0	466	2449	0	2351
Capacity Analysis Module:												
Vol/Sat:	0.02	0.23	0.02	0.03	0.26	0.26	0.06	0.00	0.06	0.02	0.00	0.02
Crit Moves:	****				****		****			****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Avalon Blvd & University Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.723
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	0 0	1
Volume Module:												
Base Vol:	0	961	330	351	1033	0	0	0	0	471	0	233
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	961	330	351	1033	0	0	0	0	471	0	233
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	961	330	351	1033	0	0	0	0	471	0	233
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	961	330	351	1033	0	0	0	0	471	0	233
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	961	330	351	1033	0	0	0	0	471	0	233
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.21	0.12	0.22	0.00	0.00	0.00	0.00	0.29	0.00	0.15
Crit Moves:			****	****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Avalon Blvd & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.592
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2	1 0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	88	1078	0	0	1418	84	198	0	168	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	88	1078	0	0	1418	84	198	0	168	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	88	1078	0	0	1418	84	198	0	168	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	88	1078	0	0	1418	84	198	0	168	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	88	1078	0	0	1418	84	198	0	168	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.83	0.17	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4532	268	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.22	0.00	0.00	0.31	0.31	0.12	0.00	0.11	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Avalon Blvd & Elsmere Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.435
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 0	1 0	3	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	0	1142	65	59	1526	0	0	0	0	28	0	35
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1142	65	59	1526	0	0	0	0	28	0	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1142	65	59	1526	0	0	0	0	28	0	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1142	65	59	1526	0	0	0	0	28	0	35
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1142	65	59	1526	0	0	0	0	28	0	35
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.84	0.16	1.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4542	258	1600	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.25	0.04	0.32	0.00	0.00	0.00	0.00	0.02	0.00	0.02
Crit Moves:	****				****					****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Avalon Blvd & Turmont St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.494
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 1	0	1 0	3 0	0	0 0	0 0	0 0	1 0	0 0	1
Volume Module:												
Base Vol:	36	1135	193	103	1473	0	0	0	0	84	0	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	36	1135	193	103	1473	0	0	0	0	84	0	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	36	1135	193	103	1473	0	0	0	0	84	0	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	1135	193	103	1473	0	0	0	0	84	0	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	36	1135	193	103	1473	0	0	0	0	84	0	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.56	0.44	1.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	4102	698	1600	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.28	0.28	0.06	0.31	0.00	0.00	0.00	0.00	0.05	0.00	0.04
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Avalon Blvd & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.897
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	99	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	139	961	179	289	924	301	199	950	210	253	610	146
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	139	961	179	289	924	301	199	950	210	253	610	146
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	139	961	179	289	924	301	199	950	210	253	610	146
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	139	961	179	289	924	301	199	950	210	253	610	146
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	139	961	179	289	924	301	199	950	210	253	610	146
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.26	0.74	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	3200	3621	1179	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.20	0.11	0.09	0.26	0.26	0.12	0.30	0.13	0.16	0.19	0.09
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Avalon Blvd & I-405 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.508
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 1	0 0	1
Volume Module:												
Base Vol:	301	1080	0	0	1333	481	0	0	0	82	2	386
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	301	1080	0	0	1333	481	0	0	0	82	2	386
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	301	1080	0	0	1333	0	0	0	0	82	2	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	301	1080	0	0	1333	0	0	0	0	82	2	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	301	1080	0	0	1333	0	0	0	0	82	2	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.95	0.05	1.00
Final Sat.:	2880	3200	0	0	4800	1600	0	0	0	3124	76	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.34	0.00	0.00	0.28	0.00	0.00	0.00	0.00	0.03	0.03	0.00
Crit Moves:	****				****					****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avalon Blvd & I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.586
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	2	0 1	2 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	1101	181	0	1055	364	245	169	345	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1101	181	0	1055	364	245	169	345	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	1101	181	0	1055	364	245	169	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1101	181	0	1055	364	245	169	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	0	1101	181	0	1055	364	245	169	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.72	0.28	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2748	452	0	3200	1600	2880	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.40	0.40	0.00	0.33	0.23	0.09	0.05	0.00	0.00	0.00	0.00
Crit Moves:		****		****			****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 Main St & SR 91 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.581
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	1	574	98	108	726	0	0	0	0	240	0	326
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	574	98	108	726	0	0	0	0	240	0	326
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	574	98	108	726	0	0	0	0	240	0	326
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	574	98	108	726	0	0	0	0	240	0	326
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	1	574	98	108	726	0	0	0	0	240	0	326
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.71	0.29	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	2733	467	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.21	0.07	0.23	0.00	0.00	0.00	0.00	0.15	0.00	0.20
Crit Moves:		****		****								****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.814
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	70	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	103	383	135	220	593	170	58	648	143	107	247	226
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	103	383	135	220	593	170	58	648	143	107	247	226
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	103	383	135	220	593	170	58	648	143	107	247	226
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	103	383	135	220	593	170	58	648	143	107	247	226
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	103	383	135	220	593	170	58	648	143	107	247	226
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.48	0.52	1.00	1.55	0.45	1.00	1.64	0.36	1.00	1.04	0.96
Final Sat.:	1600	2366	834	1600	2487	713	1600	2621	579	1600	1671	1529
Capacity Analysis Module:												
Vol/Sat:	0.06	0.16	0.16	0.14	0.24	0.24	0.04	0.25	0.25	0.07	0.15	0.15
Crit Moves:			****			****			****			

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Main St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.736
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	45	313	161	163	568	86	81	963	75	127	604	136
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	45	313	161	163	568	86	81	963	75	127	604	136
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	45	313	161	163	568	86	81	963	75	127	604	136
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	313	161	163	568	86	81	963	75	127	604	136
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	45	313	161	163	568	86	81	963	75	127	604	136
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.74	0.26	1.00	1.86	0.14	1.00	1.63	0.37
Final Sat.:	1600	3200	1600	1600	2779	421	1600	2969	231	1600	2612	588
Capacity Analysis Module:												
Vol/Sat:	0.03	0.10	0.10	0.10	0.20	0.20	0.05	0.32	0.32	0.08	0.23	0.23
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 Figueroa St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.692
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	105	500	144	67	715	107	114	845	219	67	661	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	105	500	144	67	715	107	114	845	219	67	661	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	105	500	144	67	715	107	114	845	219	67	661	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	105	500	144	67	715	107	114	845	219	67	661	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	105	500	144	67	715	107	114	845	219	67	661	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.55	0.45	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.78	0.22
Final Sat.:	1600	2484	716	1600	3200	1600	1600	3200	1600	1600	2855	345
Capacity Analysis Module:												
Vol/Sat:	0.07	0.20	0.20	0.04	0.22	0.07	0.07	0.26	0.14	0.04	0.23	0.23
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 I-110 NB On-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.471
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	2	0	1	1	0	1	0	2	0	1
Volume Module:												
Base Vol:	0	0	0	0	0	0	435	1188	0	0	676	241
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	435	1188	0	0	676	241
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	435	1188	0	0	676	241
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	435	1188	0	0	676	241
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	435	1188	0	0	676	241
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	1600	0	0	0	0	3200	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.37	0.00	0.00	0.21	0.15
Crit Moves:								****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 I-110 SB Off-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.802
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	0 0	2 0	0	0 0	3 0	0
Volume Module:												
Base Vol:	0	0	0	309	0	461	0	1323	0	0	670	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	309	0	461	0	1323	0	0	670	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	309	0	461	0	1323	0	0	670	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	309	0	461	0	1323	0	0	670	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	309	0	461	0	1323	0	0	670	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.19	0.00	0.29	0.00	0.41	0.00	0.00	0.14	0.00
Crit Moves:						****		****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 Central Ave & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.736
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	2 0	2 0	1	2 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	125	524	35	174	648	336	504	685	190	18	342	211
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	125	524	35	174	648	336	504	685	190	18	342	211
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	125	524	35	174	648	336	504	685	190	18	342	211
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	125	524	35	174	648	336	504	685	190	18	342	211
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	125	524	35	174	648	336	504	685	190	18	342	211
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.57	0.43	1.00	1.24	0.76
Final Sat.:	1600	3200	1600	2880	3200	1600	2880	2505	695	1600	1979	1221
Capacity Analysis Module:												
Vol/Sat:	0.08	0.16	0.02	0.06	0.20	0.21	0.17	0.27	0.27	0.01	0.17	0.17
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 Hamilton Ave & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.768
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	24	34	124	292	315	62	13	573	197	267	439	97
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	24	34	124	292	315	62	13	573	197	267	439	97
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	24	34	124	292	315	62	13	573	197	267	439	97
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	34	124	292	315	62	13	573	197	267	439	97
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	24	34	124	292	315	62	13	573	197	267	439	97
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.67	0.33	1.00	1.49	0.51	1.00	1.64	0.36
Final Sat.:	1600	1600	1600	1600	2674	526	1600	2381	819	1600	2621	579
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.08	0.18	0.12	0.12	0.01	0.24	0.24	0.17	0.17	0.17
Crit Moves:			****	****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #25 Hamilton Ave & I-110 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.659
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Ignore			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 0	1	0 1	1 0	0	0 0	0 0	0 0	1 0	1! 0	0
Volume Module:												
Base Vol:	0	61	534	634	169	0	0	0	0	296	0	102
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	61	534	634	169	0	0	0	0	296	0	102
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	61	0	634	169	0	0	0	0	296	0	102
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	61	0	634	169	0	0	0	0	296	0	102
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	61	0	634	169	0	0	0	0	296	0	102
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.49	0.00	0.51
Final Sat.:	0	1600	1600	1600	1600	0	0	0	0	2380	0	820
Capacity Analysis Module:												
Vol/Sat:	0.00	0.04	0.00	0.40	0.11	0.00	0.00	0.00	0.00	0.12	0.00	0.12
Crit Moves:		****		****								****

Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	All-way stop	Delay (sec / veh):	81.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.310

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	61	534	634	169	296	102
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	61	534	634	169	296	102
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	134	159	42	74	26
Total Analysis Volume [veh/h]	61	534	634	169	296	102
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	513	569	634	520	444	481
Degree of Utilization, x	0.12	0.94	1.31	0.33	0.45	0.41

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.40	12.11	27.42	1.40	2.27	2.01
95th-Percentile Queue Length [ft]	10.06	302.73	685.57	35.02	56.71	50.23
Approach Delay [s/veh]	44.66		141.73		16.32	
Approach LOS	E		F		C	
Intersection Delay [s/veh]	81.78					
Intersection LOS	F					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 Figueroa St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.822
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	72	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	63	407	307	185	693	206	68	807	132	193	533	87
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	63	407	307	185	693	206	68	807	132	193	533	87
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	63	407	307	185	693	206	68	807	132	193	533	87
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	63	407	307	185	693	206	68	807	132	193	533	87
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	63	407	307	185	693	206	68	807	132	193	533	87
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.72	0.28	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	2750	450	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.19	0.12	0.22	0.13	0.04	0.29	0.29	0.12	0.17	0.05
Crit Moves:			****	****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 Figueroa St & I-110 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.705
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	2 0	1	1 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	499	420	0	0	888	147	357	0	138	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	499	420	0	0	888	147	357	0	138	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	499	420	0	0	888	147	357	0	138	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	499	420	0	0	888	147	357	0	138	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	499	420	0	0	888	147	357	0	138	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	2.00	1.00	1.44	0.00	0.56	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	3200	1600	2308	0	892	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.17	0.13	0.00	0.00	0.28	0.09	0.15	0.00	0.15	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 SR 91 EB Ramps & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.621
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Street Name:	SR 91 EB Ramps						Albertoni St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	2 0	2 0	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	0	426	0	304	214	815	0	0	352	62
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	426	0	304	214	815	0	0	352	62
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	426	0	304	214	815	0	0	352	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	426	0	304	214	815	0	0	352	62
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	426	0	304	214	815	0	0	352	62
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.70	0.30
Final Sat.:	0	0	0	1600	0	1600	2880	3200	0	0	2721	479
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.27	0.00	0.19	0.07	0.25	0.00	0.00	0.13	0.13
Crit Moves:				****				****		****		

Intersection Level Of Service Report
Intersection 29: Main Street & Broadway

Control Type:	Two-way stop	Delay (sec / veh):	17.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.531

Intersection Setup

Name	Main Street		Main Street		Broadway	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Main Street		Main Street		Broadway	
Base Volume Input [veh/h]	215	678	683	18	0	490
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	215	678	683	18	0	490
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	54	170	171	5	0	123
Total Analysis Volume [veh/h]	215	678	683	18	0	490
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.53	0.76	0.42	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	17.07	11.44	7.81	0.00	0.00	0.00
Movement LOS	C	B	A	A		A
95th-Percentile Queue Length [veh]	1.05	1.78	0.80	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	26.36	44.51	19.89	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	12.80		7.61		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	8.04					
Intersection LOS	C					

Existing Conditions 2018
Saturday Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Main St & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.303
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	0 0	1! 0	0	1 0	1! 0	0
Volume Module:												
Base Vol:	0	220	106	86	225	0	0	0	0	75	0	79
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	220	106	86	225	0	0	0	0	75	0	79
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	220	106	86	225	0	0	0	0	75	0	79
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	220	106	86	225	0	0	0	0	75	0	79
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	220	106	86	225	0	0	0	0	75	0	79
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.35	0.65	1.00	2.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Final Sat.:	0	2160	1040	1600	3200	0	0	1600	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.10	0.10	0.05	0.07	0.00	0.00	0.00	0.00	0.05	0.00	0.05
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Main St & 1-405 NB off

Cycle (sec):	100	Critical Vol./Cap.(X):	0.321
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	0 1	0 1	0
Volume Module:												
Base Vol:	14	296	0	0	398	26	0	0	0	61	92	101
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	14	296	0	0	398	26	0	0	0	61	92	101
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	14	296	0	0	398	26	0	0	0	61	92	101
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	296	0	0	398	26	0	0	0	61	92	101
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	14	296	0	0	398	26	0	0	0	61	92	101
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.88	0.12	0.00	0.00	0.00	0.48	0.72	0.80
Final Sat.:	1600	3200	0	0	3004	196	0	0	0	769	1159	1272
Capacity Analysis Module:												
Vol/Sat:	0.01	0.09	0.00	0.00	0.13	0.13	0.00	0.00	0.00	0.04	0.08	0.08
Crit Moves:	****				****						****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Main St & I-405 SB On-Ramp

Cycle (sec):	100	Critical Vol./Cap.(X):	0.328
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	1 0	0 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	299	64	92	366	0	19	77	15	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	299	64	92	366	0	19	77	15	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	299	64	92	366	0	19	77	15	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	299	64	92	366	0	19	77	15	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	299	64	92	366	0	19	77	15	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.65	0.35	1.00	2.00	0.00	1.00	0.84	0.16	0.00	0.00	0.00
Final Sat.:	0	2636	564	1600	3200	0	1600	1339	261	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.11	0.11	0.06	0.11	0.00	0.01	0.06	0.06	0.00	0.00	0.00
Crit Moves:		****		****				****				

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Avalon Blvd & Artesia Blvd/SR 90

Cycle (sec):	100	Critical Vol./Cap.(X):	0.424
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	681	255	113	666	0	0	0	0	385	0	218
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	681	255	113	666	0	0	0	0	385	0	218
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	681	255	113	666	0	0	0	0	385	0	218
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	681	255	113	666	0	0	0	0	385	0	218
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	681	255	113	666	0	0	0	0	385	0	218
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.92	0.00	1.08
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	3065	0	1735
Capacity Analysis Module:												
Vol/Sat:	0.00	0.14	0.16	0.04	0.14	0.00	0.00	0.00	0.00	0.13	0.00	0.13
Crit Moves:			****	****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Avalon Blvd & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.396
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2	1 0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	78	977	0	0	899	44	82	0	76	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	78	977	0	0	899	44	82	0	76	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	78	977	0	0	899	44	82	0	76	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	78	977	0	0	899	44	82	0	76	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	78	977	0	0	899	44	82	0	76	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.86	0.14	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4576	224	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.20	0.00	0.00	0.20	0.20	0.05	0.00	0.05	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Avalon Blvd & Elsmere Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.365
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2 1	0	1 0	3 0	0	0 0	0 0	0 0	1 0	0 0	1
Volume Module:												
Base Vol:	0	983	44	49	930	0	0	0	0	32	0	26
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	983	44	49	930	0	0	0	0	32	0	26
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	983	44	49	930	0	0	0	0	32	0	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	983	44	49	930	0	0	0	0	32	0	26
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	983	44	49	930	0	0	0	0	32	0	26
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.87	0.13	1.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4594	206	1600	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.21	0.03	0.19	0.00	0.00	0.00	0.00	0.02	0.00	0.02
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Avalon Blvd & Turmont St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.436
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 1	0	1 0	3 0	0	0 0	0 0	0 0	1 0	0 0	1
Volume Module:												
Base Vol:	51	984	149	39	933	0	0	0	0	121	0	47
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	51	984	149	39	933	0	0	0	0	121	0	47
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	51	984	149	39	933	0	0	0	0	121	0	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	51	984	149	39	933	0	0	0	0	121	0	47
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	51	984	149	39	933	0	0	0	0	121	0	47
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.61	0.39	1.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	4169	631	1600	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.24	0.24	0.02	0.19	0.00	0.00	0.00	0.00	0.08	0.00	0.03
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Avalon Blvd & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.634
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	160	775	160	251	691	151	197	351	114	239	305	141
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	775	160	251	691	151	197	351	114	239	305	141
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	160	775	160	251	691	151	197	351	114	239	305	141
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	775	160	251	691	151	197	351	114	239	305	141
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	160	775	160	251	691	151	197	351	114	239	305	141
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.46	0.54	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	3200	3939	861	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.16	0.10	0.08	0.18	0.18	0.12	0.11	0.07	0.15	0.10	0.09
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Avalon Blvd & I-405 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.528
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 1	0 0	1
Volume Module:												
Base Vol:	294	1272	0	0	1066	613	0	0	0	98	0	395
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	294	1272	0	0	1066	613	0	0	0	98	0	395
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	294	1272	0	0	1066	0	0	0	0	98	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	294	1272	0	0	1066	0	0	0	0	98	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	294	1272	0	0	1066	0	0	0	0	98	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	2880	3200	0	0	4800	1600	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.40	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.03	0.00	0.00
Crit Moves:		****								****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avalon Blvd & I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.657
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	2	0 1	2 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	984	129	0	840	302	603	15	368	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	984	129	0	840	302	603	15	368	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	984	129	0	840	302	603	15	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	984	129	0	840	302	603	15	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	0	984	129	0	840	302	603	15	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.77	0.23	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2829	371	0	3200	1600	2880	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.35	0.35	0.00	0.26	0.19	0.21	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****		****			****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 Main St & SR 91 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.277
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	24	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0 1			1 0 2		0 0	0 0 0			1 0 0		0 1
Volume Module:												
Base Vol:	0	185	96	35	202	0	0	0	0	108	0	107
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	185	96	35	202	0	0	0	0	108	0	107
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	185	96	35	202	0	0	0	0	108	0	107
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	185	96	35	202	0	0	0	0	108	0	107
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	185	96	35	202	0	0	0	0	108	0	107
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.32	0.68	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	2107	1093	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.09	0.09	0.02	0.06	0.00	0.00	0.00	0.00	0.07	0.00	0.07
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.424
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	47	163	104	159	228	73	36	303	46	51	176	149
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	47	163	104	159	228	73	36	303	46	51	176	149
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	47	163	104	159	228	73	36	303	46	51	176	149
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	47	163	104	159	228	73	36	303	46	51	176	149
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	47	163	104	159	228	73	36	303	46	51	176	149
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.22	0.78	1.00	1.51	0.49	1.00	1.74	0.26	1.00	1.08	0.92
Final Sat.:	1600	1954	1246	1600	2424	776	1600	2778	422	1600	1733	1467
Capacity Analysis Module:												
Vol/Sat:	0.03	0.08	0.08	0.10	0.09	0.09	0.02	0.11	0.11	0.03	0.10	0.10
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 I-110 NB On-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.353
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	2	0	1	1	0	1	0	2	0	1
Volume Module:												
Base Vol:	0	0	0	0	0	0	376	635	0	4	433	183
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	376	635	0	4	433	183
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	376	635	0	4	433	183
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	376	635	0	4	433	183
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	376	635	0	4	433	183
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	1600	0	0	0	0	3200	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.20	0.00	0.00	0.14	0.11
Crit Moves:							****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 I-110 SB Off-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.603
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	0 0	2 0	0	0 0	3 0	0
Volume Module:												
Base Vol:	0	0	0	232	0	355	0	900	0	0	472	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	232	0	355	0	900	0	0	472	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	232	0	355	0	900	0	0	472	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	232	0	355	0	900	0	0	472	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	232	0	355	0	900	0	0	472	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.15	0.00	0.22	0.00	0.28	0.00	0.00	0.10	0.00
Crit Moves:						****		****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 SR 91 EB Ramps & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.433
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Street Name:	SR 91 EB Ramps						Albertoni St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	2 0	2 0	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	0	208	0	118	268	263	0	0	284	67
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	208	0	118	268	263	0	0	284	67
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	208	0	118	268	263	0	0	284	67
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	208	0	118	268	263	0	0	284	67
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	208	0	118	268	263	0	0	284	67
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.62	0.38
Final Sat.:	0	0	0	1600	0	1600	2880	3200	0	0	2589	611
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.07	0.09	0.08	0.00	0.00	0.11	0.11
Crit Moves:				****			****				****	

Existing with Project Conditions 2018
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Main St & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.471
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0 1	0	1	0 2	0 0	0	0 1!	0 0	1	0 1!	0 0
Volume Module:												
Base Vol:	4	455	166	113	540	0	1	0	3	182	0	154
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	455	166	113	540	0	1	0	3	182	0	154
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	455	166	113	540	0	1	0	3	182	0	154
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	455	166	113	540	0	1	0	3	182	0	154
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	4	455	166	113	540	0	1	0	3	182	0	154
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	1.46	0.53	1.00	2.00	0.00	0.25	0.00	0.75	1.08	0.00	0.92
Final Sat.:	20	2330	850	1600	3200	0	400	0	1200	1733	0	1467
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.20	0.07	0.17	0.00	0.00	0.00	0.00	0.11	0.00	0.10
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Main St & 1-405 NB off

Cycle (sec):	100	Critical Vol./Cap.(X):	0.576
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1	1 0	0 0	0 0	0	0 1	0	1 0
Volume Module:												
Base Vol:	28	679	0	0	747	70	0	0	0	87	324	239
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	28	679	0	0	747	70	0	0	0	87	324	239
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	28	679	0	0	747	70	0	0	0	87	324	239
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	28	679	0	0	747	70	0	0	0	87	324	239
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	28	679	0	0	747	70	0	0	0	87	324	239
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.83	0.17	0.00	0.00	0.00	0.27	1.00	0.73
Final Sat.:	1600	3200	0	0	2926	274	0	0	0	428	1595	1177
Capacity Analysis Module:												
Vol/Sat:	0.02	0.21	0.00	0.00	0.26	0.26	0.00	0.00	0.00	0.05	0.20	0.20
Crit Moves:	****				****						****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Main St & I-405 SB On-Ramp

Cycle (sec):	100	Critical Vol./Cap.(X):	0.463
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	1 0	0 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	621	52	152	740	0	29	71	21	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	621	52	152	740	0	29	71	21	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	621	52	152	740	0	29	71	21	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	621	52	152	740	0	29	71	21	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	621	52	152	740	0	29	71	21	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.85	0.15	1.00	2.00	0.00	1.00	0.77	0.23	0.00	0.00	0.00
Final Sat.:	0	2953	247	1600	3200	0	1600	1235	365	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.21	0.10	0.23	0.00	0.02	0.06	0.06	0.00	0.00	0.00
Crit Moves:		****		****				****				

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Main St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.679
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	73	561	309	39	524	151	130	579	34	231	918	49
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	73	561	309	39	524	151	130	579	34	231	918	49
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	73	561	309	39	524	151	130	579	34	231	918	49
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	73	561	309	39	524	151	130	579	34	231	918	49
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	73	561	309	39	524	151	130	579	34	231	918	49
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.29	0.71	1.00	1.55	0.45	1.00	2.83	0.17	1.00	2.85	0.15
Final Sat.:	1600	2063	1137	1600	2484	716	1600	4534	266	1600	4557	243
Capacity Analysis Module:												
Vol/Sat:	0.05	0.27	0.27	0.02	0.21	0.21	0.08	0.13	0.13	0.14	0.20	0.20
Crit Moves:		****		****			****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Main St & Torrance Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.626
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	1 0	2 0	1	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	309	618	7	13	545	234	281	18	181	13	54	32
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	309	618	7	13	545	234	281	18	181	13	54	32
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	309	618	7	13	545	234	281	18	181	13	54	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	309	618	7	13	545	234	281	18	181	13	54	32
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	309	618	7	13	545	234	281	18	181	13	54	32
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.98	0.02	1.00	2.00	1.00	0.94	0.06	1.00	0.13	0.55	0.32
Final Sat.:	2880	3164	36	1600	3200	1600	1504	96	1600	210	873	517
Capacity Analysis Module:												
Vol/Sat:	0.11	0.20	0.20	0.01	0.17	0.15	0.19	0.19	0.11	0.06	0.06	0.06
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Avalon Blvd & Artesia Blvd/SR 90

Cycle (sec):	100	Critical Vol./Cap.(X):	0.547
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	915	165	177	1092	0	0	0	0	337	0	600
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	915	165	177	1092	0	0	0	0	337	0	600
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	915	165	177	1092	0	0	0	0	337	0	600
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	915	165	177	1092	0	0	0	0	337	0	600
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	915	165	177	1092	0	0	0	0	337	0	600
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.08	xxxx	1.92
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	1726	0	3074
Capacity Analysis Module:												
Vol/Sat:	0.00	0.19	0.10	0.06	0.23	0.00	0.00	0.00	0.00	0.20	0.00	0.20
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Avalon Blvd & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.649
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	1 0	1 1	1	1 0	1 1	1
Volume Module:												
Base Vol:	181	724	153	339	663	376	181	127	311	86	20	235
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	181	724	153	339	663	376	181	127	311	86	20	235
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	181	724	153	339	663	376	181	127	311	86	20	235
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	181	724	153	339	663	376	181	127	311	86	20	235
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	181	724	153	339	663	376	181	127	311	86	20	235
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3200	1600	1600	1600	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.11	0.15	0.10	0.21	0.21	0.24	0.11	0.08	0.10	0.05	0.01	0.07
Crit Moves:		****		****			****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Avalon Blvd & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.595
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	136	696	204	379	699	78	85	497	81	101	416	221
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	136	696	204	379	699	78	85	497	81	101	416	221
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	136	696	204	379	699	78	85	497	81	101	416	221
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	136	696	204	379	699	78	85	497	81	101	416	221
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	136	696	204	379	699	78	85	497	81	101	416	221
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.70	0.30	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	4318	482	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.15	0.13	0.13	0.16	0.16	0.05	0.16	0.05	0.06	0.13	0.14
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Avalon Blvd & 184th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.395
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	0 0	1! 0	0	1 0	1! 0	1
Volume Module:												
Base Vol:	19	982	62	37	848	8	57	0	45	8	0	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	19	982	62	37	848	8	57	0	45	8	0	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	19	982	62	37	848	8	57	0	45	8	0	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	982	62	37	848	8	57	0	45	8	0	11
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	19	982	62	37	848	8	57	0	45	8	0	11
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.97	0.03	0.56	0.00	0.44	1.26	0.00	1.74
Final Sat.:	1600	4800	1600	1600	4755	45	894	0	706	2021	0	2779
Capacity Analysis Module:												
Vol/Sat:	0.01	0.20	0.04	0.02	0.18	0.18	0.06	0.00	0.06	0.00	0.00	0.00
Crit Moves:		****		****					****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Avalon Blvd & University Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.669
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	0 0	1
Volume Module:												
Base Vol:	0	844	479	289	612	0	0	0	0	250	0	271
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	844	479	289	612	0	0	0	0	250	0	271
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	844	479	289	612	0	0	0	0	250	0	271
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	844	479	289	612	0	0	0	0	250	0	271
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	844	479	289	612	0	0	0	0	250	0	271
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.18	0.30	0.10	0.13	0.00	0.00	0.00	0.00	0.16	0.00	0.17
Crit Moves:			****	****								****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Avalon Blvd & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.434
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2	1 0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	128	1205	0	0	727	121	123	0	63	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	128	1205	0	0	727	121	123	0	63	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	128	1205	0	0	727	121	123	0	63	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	128	1205	0	0	727	121	123	0	63	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	128	1205	0	0	727	121	123	0	63	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.57	0.43	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4115	685	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.25	0.00	0.00	0.18	0.18	0.08	0.00	0.04	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Avalon Blvd & Elsmere Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.461
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	0	1278	63	35	762	0	1	0	1	96	0	41
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1278	63	35	762	0	1	0	1	96	0	41
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1278	63	35	762	0	1	0	1	96	0	41
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1278	63	35	762	0	1	0	1	96	0	41
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1278	63	35	762	0	1	0	1	96	0	41
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.86	0.14	1.00	3.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	1600	4574	226	1600	4800	0	1600	0	1600	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.28	0.28	0.02	0.16	0.00	0.00	0.00	0.00	0.06	0.00	0.03
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Avalon Blvd & Turmont St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.522
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 1	0	1 0	3 0	0	0 0	0 0	0 0	1 0	0 1	0
Volume Module:												
Base Vol:	20	1227	114	68	798	0	0	0	0	160	0	102
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	1227	114	68	798	0	0	0	0	160	0	102
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	1227	114	68	798	0	0	0	0	160	0	102
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	1227	114	68	798	0	0	0	0	160	0	102
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	1227	114	68	798	0	0	0	0	160	0	102
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.74	0.26	1.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1440	4392	408	1600	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.28	0.28	0.04	0.17	0.00	0.00	0.00	0.00	0.10	0.00	0.06
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Avalon Blvd & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.798
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	66	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	145	847	134	189	625	246	257	534	85	184	849	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	145	847	134	189	625	246	257	534	85	184	849	98
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	145	847	134	189	625	246	257	534	85	184	849	98
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	145	847	134	189	625	246	257	534	85	184	849	98
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	145	847	134	189	625	246	257	534	85	184	849	98
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.15	0.85	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	3200	3444	1356	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.18	0.08	0.06	0.18	0.18	0.16	0.17	0.05	0.12	0.27	0.06
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Avalon Blvd & I-405 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.470
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 1	0 0	1
Volume Module:												
Base Vol:	414	1119	0	0	772	259	0	0	0	66	0	423
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	414	1119	0	0	772	259	0	0	0	66	0	423
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	414	1119	0	0	772	0	0	0	0	66	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	414	1119	0	0	772	0	0	0	0	66	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	414	1119	0	0	772	0	0	0	0	66	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	2880	3200	0	0	4800	1600	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.14	0.35	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.02	0.00	0.00
Crit Moves:		****								****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avalon Blvd & I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.603
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	2	0 1	2 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	1015	100	0	570	271	444	13	554	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1015	100	0	570	271	444	13	554	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	1015	100	0	570	271	444	13	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1015	100	0	570	271	444	13	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	0	1015	100	0	570	271	444	13	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.82	0.18	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2913	287	0	3200	1600	2880	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.35	0.35	0.00	0.18	0.17	0.15	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****		****			****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 Main St & SR 91 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.632
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	0	540	104	65	494	0	0	0	0	464	0	405
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	540	104	65	494	0	0	0	0	464	0	405
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	540	104	65	494	0	0	0	0	464	0	405
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	540	104	65	494	0	0	0	0	464	0	405
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	540	104	65	494	0	0	0	0	464	0	405
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.68	0.32	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	2683	517	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.20	0.04	0.15	0.00	0.00	0.00	0.00	0.29	0.00	0.25
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.698
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	114	377	123	152	428	277	32	302	76	127	419	226
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	114	377	123	152	428	277	32	302	76	127	419	226
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	114	377	123	152	428	277	32	302	76	127	419	226
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	114	377	123	152	428	277	32	302	76	127	419	226
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	114	377	123	152	428	277	32	302	76	127	419	226
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.51	0.49	1.00	1.21	0.79	1.00	1.60	0.40	1.00	1.30	0.70
Final Sat.:	1600	2413	787	1600	1943	1257	1600	2557	643	1600	2079	1121
Capacity Analysis Module:												
Vol/Sat:	0.07	0.16	0.16	0.10	0.22	0.22	0.02	0.12	0.12	0.08	0.20	0.20
Crit Moves:		****				****	****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Main St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.547
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	62	416	117	62	386	95	68	408	48	184	529	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	62	416	117	62	386	95	68	408	48	184	529	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	62	416	117	62	386	95	68	408	48	184	529	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	62	416	117	62	386	95	68	408	48	184	529	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	62	416	117	62	386	95	68	408	48	184	529	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.60	0.40	1.00	1.79	0.21	1.00	1.63	0.37
Final Sat.:	1600	3200	1600	1600	2568	632	1600	2863	337	1600	2608	592
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.07	0.04	0.15	0.15	0.04	0.14	0.14	0.12	0.20	0.20
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 Figueroa St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.609
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	151	569	89	43	400	120	151	474	144	60	511	72
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	151	569	89	43	400	120	151	474	144	60	511	72
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	151	569	89	43	400	120	151	474	144	60	511	72
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	151	569	89	43	400	120	151	474	144	60	511	72
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	151	569	89	43	400	120	151	474	144	60	511	72
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.73	0.27	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.75	0.25
Final Sat.:	1600	2767	433	1600	3200	1600	1600	3200	1600	1600	2805	395
Capacity Analysis Module:												
Vol/Sat:	0.09	0.21	0.21	0.03	0.13	0.08	0.09	0.15	0.09	0.04	0.18	0.18
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 I-110 NB On-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.358
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	2	0	1	1	0	1	0	2	0	1
Volume Module:												
Base Vol:	0	0	0	0	0	0	158	826	0	0	563	202
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	158	826	0	0	563	202
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	158	826	0	0	563	202
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	158	826	0	0	563	202
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	158	826	0	0	563	202
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	1600	0	0	0	0	3200	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.26	0.00	0.00	0.18	0.13
Crit Moves:								****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 I-110 SB Off-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.772
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	61	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	0 0	2 0	0	0 0	3 0	0
Volume Module:												
Base Vol:	0	0	0	233	0	718	0	715	0	0	588	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	233	0	718	0	715	0	0	588	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	233	0	718	0	715	0	0	588	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	233	0	718	0	715	0	0	588	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	233	0	718	0	715	0	0	588	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.15	0.00	0.45	0.00	0.22	0.00	0.00	0.12	0.00
Crit Moves:						****		****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 Central Ave & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.800
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	2 0	2 0	1	2 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	126	530	23	194	734	673	221	206	123	23	281	117
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	126	530	23	194	734	673	221	206	123	23	281	117
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	126	530	23	194	734	673	221	206	123	23	281	117
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	126	530	23	194	734	673	221	206	123	23	281	117
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	126	530	23	194	734	673	221	206	123	23	281	117
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.25	0.75	1.00	1.41	0.59
Final Sat.:	1600	3200	1600	2880	3200	1600	2880	2004	1196	1600	2259	941
Capacity Analysis Module:												
Vol/Sat:	0.08	0.17	0.01	0.07	0.23	0.42	0.08	0.10	0.10	0.01	0.12	0.12
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 Hamilton Ave & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.547
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	58	130	66	50	63	14	37	266	80	383	709	352
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	58	130	66	50	63	14	37	266	80	383	709	352
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	58	130	66	50	63	14	37	266	80	383	709	352
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	58	130	66	50	63	14	37	266	80	383	709	352
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	58	130	66	50	63	14	37	266	80	383	709	352
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.33	0.67	1.00	1.64	0.36	1.00	1.54	0.46	1.00	1.34	0.66
Final Sat.:	1600	2122	1078	1600	2618	582	1600	2460	740	1600	2138	1062
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.06	0.03	0.02	0.02	0.02	0.11	0.11	0.24	0.33	0.33
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #25 Hamilton Ave & I-110 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.672
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Ignore			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	0 1	0 1	1	0 0	0 0	0	0 0	1 0	1!	0 0
Volume Module:												
Base Vol:	0	79	110	337	95	0	0	0	0	764	0	234
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	79	110	337	95	0	0	0	0	764	0	234
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	79	0	337	95	0	0	0	0	764	0	234
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	79	0	337	95	0	0	0	0	764	0	234
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	79	0	337	95	0	0	0	0	764	0	234
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.53	0.00	0.47
Final Sat.:	0	1600	1600	1600	1600	0	0	0	0	2450	0	750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.05	0.00	0.21	0.06	0.00	0.00	0.00	0.00	0.31	0.00	0.31
Crit Moves:		****		****								****

Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	All-way stop	Delay (sec / veh):	40.6
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.979

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	79	110	337	95	764	234
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	79	110	337	95	764	234
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	28	84	24	191	59
Total Analysis Volume [veh/h]	79	110	337	95	764	234
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	454	500	451	482	509	554
Degree of Utilization, x	0.17	0.22	0.75	0.20	0.98	0.90

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.62	0.83	6.19	0.73	13.03	10.68
95th-Percentile Queue Length [ft]	15.58	20.80	154.66	18.15	325.81	267.03
Approach Delay [s/veh]	12.07		26.63		52.00	
Approach LOS	B		D		F	
Intersection Delay [s/veh]	40.57					
Intersection LOS	E					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 Figueroa St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.733
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	193	641	327	50	347	349	56	263	77	105	828	97
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	193	641	327	50	347	349	56	263	77	105	828	97
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	193	641	327	50	347	349	56	263	77	105	828	97
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	193	641	327	50	347	349	56	263	77	105	828	97
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	193	641	327	50	347	349	56	263	77	105	828	97
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.55	0.45	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	2475	725	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.12	0.20	0.20	0.03	0.11	0.22	0.04	0.11	0.11	0.07	0.26	0.06
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 Figueroa St & I-110 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.700
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	2 0	1	1 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	657	599	0	0	411	126	556	0	223	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	657	599	0	0	411	126	556	0	223	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	657	599	0	0	411	126	556	0	223	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	657	599	0	0	411	126	556	0	223	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	657	599	0	0	411	126	556	0	223	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	2.00	1.00	1.43	0.00	0.57	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	3200	1600	2284	0	916	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.23	0.19	0.00	0.00	0.13	0.08	0.24	0.00	0.24	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 SR 91 EB Ramps & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.552
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Street Name:	SR 91 EB Ramps						Albertoni St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	1 0	0	0 1	2 0	2	0 0	0 0	1	1 0
Volume Module:												
Base Vol:	0	0	0	278	0	240	277	328	0	0	495	88
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	278	0	240	277	328	0	0	495	88
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	278	0	240	277	328	0	0	495	88
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	278	0	240	277	328	0	0	495	88
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	278	0	240	277	328	0	0	495	88
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.70	0.30
Final Sat.:	0	0	0	1600	0	1600	2880	3200	0	0	2717	483
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.17	0.00	0.15	0.10	0.10	0.00	0.00	0.18	0.18
Crit Moves:				****			****				****	

Intersection Level Of Service Report
Intersection 29: Main Street & Broadway

Control Type:	Two-way stop	Delay (sec / veh):	18.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.671

Intersection Setup

Name	Main Street		Main Street		Broadway	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Main Street		Main Street		Broadway	
Base Volume Input [veh/h]	269	698	703	5	0	184
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	269	698	703	5	0	184
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	67	175	176	1	0	46
Total Analysis Volume [veh/h]	269	698	703	5	0	184
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.67	0.78	0.43	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	18.44	11.56	7.83	0.00	0.00	0.00
Movement LOS	C	B	A	A		A
95th-Percentile Queue Length [veh]	1.45	1.86	0.82	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	36.26	46.59	20.62	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	13.47		7.77		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	9.97					
Intersection LOS	C					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #30 New Intersection & MLK Jr Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.291
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1 0	0 1	0	0 0	0 0	0	0 1	0 1	1	0 1	0 0
Volume Module:												
Base Vol:	57	0	25	0	0	0	0	183	74	32	248	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	57	0	25	0	0	0	0	183	74	32	248	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	57	0	25	0	0	0	0	183	74	32	248	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	57	0	25	0	0	0	0	183	74	32	248	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	57	0	25	0	0	0	0	183	74	32	248	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	1600	1600	1600	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.04	0.00	0.02	0.00	0.00	0.00	0.00	0.11	0.05	0.02	0.16	0.00
Crit Moves:	****						****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #31 Avalon Blvd & New Driveway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.378
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0 0	2	1 0	1 0	0	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	1335	0	0	835	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1335	0	0	835	0	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1335	0	0	835	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1335	0	0	835	0	0	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1335	0	0	835	0	0	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	3.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	4800	0	0	4800	0	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.28	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****		****								

Existing with Project Conditions 2018
Afternoon Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Main St & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.617
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0 1	0	1	0 2	0 0	0	0 0	0 1	1	0 1!	0 0
Volume Module:												
Base Vol:	2	518	275	286	658	0	0	0	3	136	0	144
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	518	275	286	658	0	0	0	3	136	0	144
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	518	275	286	658	0	0	0	3	136	0	144
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	518	275	286	658	0	0	0	3	136	0	144
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	518	275	286	658	0	0	0	3	136	0	144
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	1.30	0.69	1.00	2.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	8	2085	1107	1600	3200	0	0	0	1600	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.25	0.18	0.21	0.00	0.00	0.00	0.00	0.09	0.00	0.09
Crit Moves:		****		****			****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Main St & 1-405 NB off

Cycle (sec):	100	Critical Vol./Cap.(X):	0.694
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	0 1	0 1	0
Volume Module:												
Base Vol:	21	703	0	0	1276	92	0	0	0	61	121	246
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	703	0	0	1276	92	0	0	0	61	121	246
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	21	703	0	0	1276	92	0	0	0	61	121	246
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	21	703	0	0	1276	92	0	0	0	61	121	246
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	21	703	0	0	1276	92	0	0	0	61	121	246
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.87	0.13	0.00	0.00	0.00	0.29	0.71	1.00
Final Sat.:	1600	3200	0	0	2985	215	0	0	0	456	1144	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.22	0.00	0.00	0.43	0.43	0.00	0.00	0.00	0.04	0.11	0.15
Crit Moves:	****				****							****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Main St & I-405 SB On-Ramp

Cycle (sec):	100	Critical Vol./Cap.(X):	0.718
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	1 0	0 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	668	109	282	1055	0	61	276	42	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	668	109	282	1055	0	61	276	42	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	668	109	282	1055	0	61	276	42	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	668	109	282	1055	0	61	276	42	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	668	109	282	1055	0	61	276	42	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.72	0.28	1.00	2.00	0.00	1.00	0.87	0.13	0.00	0.00	0.00
Final Sat.:	0	2751	449	1600	3200	0	1600	1389	211	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.24	0.24	0.18	0.33	0.00	0.04	0.20	0.20	0.00	0.00	0.00
Crit Moves:		****		****				****				

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Main St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.876
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	89	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	35	472	345	100	837	189	232	1102	102	293	704	61
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	35	472	345	100	837	189	232	1102	102	293	704	61
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	35	472	345	100	837	189	232	1102	102	293	704	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	472	345	100	837	189	232	1102	102	293	704	61
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	35	472	345	100	837	189	232	1102	102	293	704	61
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.16	0.84	1.00	1.63	0.37	1.00	2.75	0.25	1.00	2.76	0.24
Final Sat.:	1600	1849	1351	1600	2611	589	1600	4393	407	1600	4417	383
Capacity Analysis Module:												
Vol/Sat:	0.02	0.26	0.26	0.06	0.32	0.32	0.15	0.25	0.25	0.18	0.16	0.16
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Main St & Torrance Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.757
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	1 0	2 0	1	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	186	441	11	38	841	315	386	57	478	6	17	27
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	186	441	11	38	841	315	386	57	478	6	17	27
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	186	441	11	38	841	315	386	57	478	6	17	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	186	441	11	38	841	315	386	57	478	6	17	27
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	186	441	11	38	841	315	386	57	478	6	17	27
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.95	0.05	1.00	2.00	1.00	0.87	0.13	1.00	0.12	0.34	0.54
Final Sat.:	2880	3122	78	1600	3200	1600	1394	206	1600	192	544	864
Capacity Analysis Module:												
Vol/Sat:	0.06	0.14	0.14	0.02	0.26	0.20	0.28	0.28	0.30	0.03	0.03	0.03
Crit Moves:	****				****				****		****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Avalon Blvd & Artesia Blvd/SR 90

Cycle (sec):	100	Critical Vol./Cap.(X):	0.573
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	1190	232	163	1072	0	0	0	0	358	0	449
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1190	232	163	1072	0	0	0	0	358	0	449
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1190	232	163	1072	0	0	0	0	358	0	449
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1190	232	163	1072	0	0	0	0	358	0	449
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1190	232	163	1072	0	0	0	0	358	0	449
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.33	0.00	1.67
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	2129	0	2671
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.15	0.06	0.22	0.00	0.00	0.00	0.00	0.17	0.00	0.17
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Avalon Blvd & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.865
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	85	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	1 0	1 1	1	1 0	1 1	1
Volume Module:												
Base Vol:	243	922	154	261	909	263	287	787	586	132	21	189
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	243	922	154	261	909	263	287	787	586	132	21	189
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	243	922	154	261	909	263	287	787	586	132	21	189
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	243	922	154	261	909	263	287	787	586	132	21	189
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	243	922	154	261	909	263	287	787	586	132	21	189
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.33	0.67	1.00	1.72	1.28	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3723	1077	1600	2751	2049	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.15	0.19	0.10	0.16	0.24	0.24	0.18	0.29	0.29	0.08	0.01	0.06
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Avalon Blvd & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.751
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	156	860	235	427	1027	85	114	637	158	196	685	353
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	156	860	235	427	1027	85	114	637	158	196	685	353
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	156	860	235	427	1027	85	114	637	158	196	685	353
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	156	860	235	427	1027	85	114	637	158	196	685	353
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	156	860	235	427	1027	85	114	637	158	196	685	353
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.77	0.23	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	4433	367	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.18	0.15	0.15	0.23	0.23	0.07	0.20	0.10	0.12	0.21	0.22
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Avalon Blvd & 184th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.484
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	0 0	1! 0	0	1 0	1! 0	1
Volume Module:												
Base Vol:	34	1127	39	55	1300	33	73	0	30	50	0	48
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	34	1127	39	55	1300	33	73	0	30	50	0	48
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	34	1127	39	55	1300	33	73	0	30	50	0	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	34	1127	39	55	1300	33	73	0	30	50	0	48
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	34	1127	39	55	1300	33	73	0	30	50	0	48
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.93	0.07	0.71	0.00	0.29	1.53	xxxx	1.47
Final Sat.:	1600	4800	1600	1600	4681	119	1134	0	466	2449	0	2351
Capacity Analysis Module:												
Vol/Sat:	0.02	0.23	0.02	0.03	0.28	0.28	0.06	0.00	0.06	0.02	0.00	0.02
Crit Moves:	****				****		****			****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Avalon Blvd & University Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.731
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	0 0	1
Volume Module:												
Base Vol:	0	1008	336	351	1106	0	0	0	0	478	0	233
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1008	336	351	1106	0	0	0	0	478	0	233
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1008	336	351	1106	0	0	0	0	478	0	233
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1008	336	351	1106	0	0	0	0	478	0	233
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1008	336	351	1106	0	0	0	0	478	0	233
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.21	0.12	0.23	0.00	0.00	0.00	0.00	0.30	0.00	0.15
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Avalon Blvd & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.639
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2	1 0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	108	1102	0	0	1470	112	227	0	195	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	108	1102	0	0	1470	112	227	0	195	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	108	1102	0	0	1470	112	227	0	195	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	108	1102	0	0	1470	112	227	0	195	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	108	1102	0	0	1470	112	227	0	195	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.79	0.21	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4460	340	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.23	0.00	0.00	0.33	0.33	0.14	0.00	0.12	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Avalon Blvd & Elsmere Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.500
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	38	1155	65	60	1539	64	30	0	18	28	1	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	38	1155	65	60	1539	64	30	0	18	28	1	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	38	1155	65	60	1539	64	30	0	18	28	1	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	38	1155	65	60	1539	64	30	0	18	28	1	36
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	38	1155	65	60	1539	64	30	0	18	28	1	36
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.84	0.16	1.00	2.88	0.12	1.00	0.00	1.00	1.00	0.03	0.97
Final Sat.:	1600	4544	256	1600	4608	192	1600	0	1600	1600	43	1557
Capacity Analysis Module:												
Vol/Sat:	0.02	0.25	0.25	0.04	0.33	0.33	0.02	0.00	0.01	0.02	0.02	0.02
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Avalon Blvd & Turmont St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.504
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 1	0	1 0	3 0	0	0 0	0 0	0 0	1 0	0 1	0
Volume Module:												
Base Vol:	36	1186	193	103	1504	0	0	0	0	84	0	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	36	1186	193	103	1504	0	0	0	0	84	0	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	36	1186	193	103	1504	0	0	0	0	84	0	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	1186	193	103	1504	0	0	0	0	84	0	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	36	1186	193	103	1504	0	0	0	0	84	0	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.58	0.42	1.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1440	4128	672	1600	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.29	0.29	0.06	0.31	0.00	0.00	0.00	0.00	0.05	0.00	0.04
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Avalon Blvd & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.902
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	101	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	139	989	179	297	941	307	213	950	210	253	610	156
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	139	989	179	297	941	307	213	950	210	253	610	156
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	139	989	179	297	941	307	213	950	210	253	610	156
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	139	989	179	297	941	307	213	950	210	253	610	156
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	139	989	179	297	941	307	213	950	210	253	610	156
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.26	0.74	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	3200	3619	1181	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.21	0.11	0.09	0.26	0.26	0.13	0.30	0.13	0.16	0.19	0.10
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Avalon Blvd & I-405 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.511
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 1	0 0	1
Volume Module:												
Base Vol:	301	1093	0	0	1346	485	0	0	0	82	2	401
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	301	1093	0	0	1346	485	0	0	0	82	2	401
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	301	1093	0	0	1346	0	0	0	0	82	2	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	301	1093	0	0	1346	0	0	0	0	82	2	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	301	1093	0	0	1346	0	0	0	0	82	2	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.95	0.05	1.00
Final Sat.:	2880	3200	0	0	4800	1600	0	0	0	3124	76	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.34	0.00	0.00	0.28	0.00	0.00	0.00	0.00	0.03	0.03	0.00
Crit Moves:	****				****					****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avalon Blvd & I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.590
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	2	0 1	2 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	1109	181	0	1059	373	250	169	345	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1109	181	0	1059	373	250	169	345	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	1109	181	0	1059	373	250	169	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1109	181	0	1059	373	250	169	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	0	1109	181	0	1059	373	250	169	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.72	0.28	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2751	449	0	3200	1600	2880	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.40	0.40	0.00	0.33	0.23	0.09	0.05	0.00	0.00	0.00	0.00
Crit Moves:		****		****			****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 Main St & SR 91 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.592
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0 1			1 0 2		0 0	0 0 0			1 0 0		0 1
Volume Module:												
Base Vol:	1	588	119	108	741	0	0	0	0	244	0	326
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	588	119	108	741	0	0	0	0	244	0	326
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	588	119	108	741	0	0	0	0	244	0	326
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	588	119	108	741	0	0	0	0	244	0	326
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	1	588	119	108	741	0	0	0	0	244	0	326
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.66	0.34	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	2661	539	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.22	0.07	0.23	0.00	0.00	0.00	0.00	0.15	0.00	0.20
Crit Moves:		****		****								****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.849
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	80	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	109	418	139	220	613	170	58	648	150	130	247	226
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	109	418	139	220	613	170	58	648	150	130	247	226
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	109	418	139	220	613	170	58	648	150	130	247	226
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	109	418	139	220	613	170	58	648	150	130	247	226
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	109	418	139	220	613	170	58	648	150	130	247	226
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.50	0.50	1.00	1.57	0.43	1.00	1.62	0.38	1.00	1.04	0.96
Final Sat.:	1600	2401	799	1600	2505	695	1600	2598	602	1600	1671	1529
Capacity Analysis Module:												
Vol/Sat:	0.07	0.17	0.17	0.14	0.24	0.24	0.04	0.25	0.25	0.08	0.15	0.15
Crit Moves:			****		****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Main St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.777
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	62	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	67	358	161	163	618	86	81	979	96	127	611	136
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	67	358	161	163	618	86	81	979	96	127	611	136
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	67	358	161	163	618	86	81	979	96	127	611	136
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	67	358	161	163	618	86	81	979	96	127	611	136
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	67	358	161	163	618	86	81	979	96	127	611	136
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.76	0.24	1.00	1.82	0.18	1.00	1.64	0.36
Final Sat.:	1600	3200	1600	1600	2809	391	1600	2914	286	1600	2617	583
Capacity Analysis Module:												
Vol/Sat:	0.04	0.11	0.10	0.10	0.22	0.22	0.05	0.34	0.34	0.08	0.23	0.23
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 Figueroa St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.707
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	105	500	144	67	715	107	114	882	219	67	690	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	105	500	144	67	715	107	114	882	219	67	690	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	105	500	144	67	715	107	114	882	219	67	690	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	105	500	144	67	715	107	114	882	219	67	690	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	105	500	144	67	715	107	114	882	219	67	690	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.55	0.45	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.79	0.21
Final Sat.:	1600	2484	716	1600	3200	1600	1600	3200	1600	1600	2868	332
Capacity Analysis Module:												
Vol/Sat:	0.07	0.20	0.20	0.04	0.22	0.07	0.07	0.28	0.14	0.04	0.24	0.24
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 I-110 NB On-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.483
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	2	0	1	1	0	1	0	2	0	1
Volume Module:												
Base Vol:	0	0	0	0	0	0	435	1225	0	0	695	251
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	435	1225	0	0	695	251
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	435	1225	0	0	695	251
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	435	1225	0	0	695	251
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	435	1225	0	0	695	251
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	1600	0	0	0	0	3200	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.38	0.00	0.00	0.22	0.16
Crit Moves:								****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 I-110 SB Off-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.809
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	69	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	0 0	2 0	0	0 0	3 0	0
Volume Module:												
Base Vol:	0	0	0	321	0	461	0	1347	0	0	689	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	321	0	461	0	1347	0	0	689	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	321	0	461	0	1347	0	0	689	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	321	0	461	0	1347	0	0	689	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	321	0	461	0	1347	0	0	689	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.20	0.00	0.29	0.00	0.42	0.00	0.00	0.14	0.00
Crit Moves:						****		****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 Central Ave & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.739
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	2 0	2 0	1	2 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	125	524	35	174	648	336	504	693	190	18	352	211
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	125	524	35	174	648	336	504	693	190	18	352	211
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	125	524	35	174	648	336	504	693	190	18	352	211
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	125	524	35	174	648	336	504	693	190	18	352	211
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	125	524	35	174	648	336	504	693	190	18	352	211
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.57	0.43	1.00	1.25	0.75
Final Sat.:	1600	3200	1600	2880	3200	1600	2880	2511	689	1600	2001	1199
Capacity Analysis Module:												
Vol/Sat:	0.08	0.16	0.02	0.06	0.20	0.21	0.17	0.28	0.28	0.01	0.18	0.18
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 Hamilton Ave & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.778
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	62	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	24	34	124	292	315	62	13	580	197	281	445	97
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	24	34	124	292	315	62	13	580	197	281	445	97
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	24	34	124	292	315	62	13	580	197	281	445	97
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	34	124	292	315	62	13	580	197	281	445	97
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	24	34	124	292	315	62	13	580	197	281	445	97
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.67	0.33	1.00	1.49	0.51	1.00	1.64	0.36
Final Sat.:	1600	1600	1600	1600	2674	526	1600	2389	811	1600	2627	573
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.08	0.18	0.12	0.12	0.01	0.24	0.24	0.18	0.17	0.17
Crit Moves:			****	****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #25 Hamilton Ave & I-110 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.668
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Ignore			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	0 1	0	1 1	0 0	0 0	0	0 0	1	0	1! 0 0
Volume Module:												
Base Vol:	0	61	534	648	169	0	0	0	0	296	0	102
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	61	534	648	169	0	0	0	0	296	0	102
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	61	0	648	169	0	0	0	0	296	0	102
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	61	0	648	169	0	0	0	0	296	0	102
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	61	0	648	169	0	0	0	0	296	0	102
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.49	0.00	0.51
Final Sat.:	0	1600	1600	1600	1600	0	0	0	0	2380	0	820
Capacity Analysis Module:												
Vol/Sat:	0.00	0.04	0.00	0.41	0.11	0.00	0.00	0.00	0.00	0.12	0.00	0.12
Crit Moves:		****		****								****

Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	All-way stop	Delay (sec / veh):	86.7
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.339

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	61	534	648	169	296	102
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	61	534	648	169	296	102
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	134	162	42	74	26
Total Analysis Volume [veh/h]	61	534	648	169	296	102
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	513	569	648	520	444	481
Degree of Utilization, x	0.12	0.94	1.34	0.33	0.45	0.41

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.40	12.11	28.91	1.40	2.27	2.01
95th-Percentile Queue Length [ft]	10.06	302.74	722.74	35.02	56.71	50.23
Approach Delay [s/veh]	44.66		151.69		16.32	
Approach LOS	E		F		C	
Intersection Delay [s/veh]	86.74					
Intersection LOS	F					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 Figueroa St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.834
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	75	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	63	407	324	185	693	206	68	814	132	193	552	87
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	63	407	324	185	693	206	68	814	132	193	552	87
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	63	407	324	185	693	206	68	814	132	193	552	87
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	63	407	324	185	693	206	68	814	132	193	552	87
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	63	407	324	185	693	206	68	814	132	193	552	87
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.72	0.28	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	2753	447	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.20	0.12	0.22	0.13	0.04	0.30	0.30	0.12	0.17	0.05
Crit Moves:			****	****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 Figueroa St & I-110 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.711
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	2 0	1	1 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	499	420	0	0	888	147	374	0	138	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	499	420	0	0	888	147	374	0	138	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	499	420	0	0	888	147	374	0	138	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	499	420	0	0	888	147	374	0	138	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	499	420	0	0	888	147	374	0	138	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	2.00	1.00	1.46	0.00	0.54	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	3200	1600	2338	0	863	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.17	0.13	0.00	0.00	0.28	0.09	0.16	0.00	0.16	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 SR 91 EB Ramps & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.621
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Street Name:	SR 91 EB Ramps						Albertoni St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	2 0	2 0	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	0	426	0	327	218	815	0	0	352	62
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	426	0	327	218	815	0	0	352	62
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	426	0	327	218	815	0	0	352	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	426	0	327	218	815	0	0	352	62
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	426	0	327	218	815	0	0	352	62
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.70	0.30
Final Sat.:	0	0	0	1600	0	1600	2880	3200	0	0	2721	479
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.27	0.00	0.20	0.08	0.25	0.00	0.00	0.13	0.13
Crit Moves:				****				****		****		

Intersection Level Of Service Report
Intersection 29: Main Street & Broadway

Control Type:	Two-way stop	Delay (sec / veh):	18.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.561

Intersection Setup

Name	Main Street		Main Street		Broadway	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Main Street		Main Street		Broadway	
Base Volume Input [veh/h]	215	717	724	18	0	490
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	215	717	724	18	0	490
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	54	179	181	5	0	123
Total Analysis Volume [veh/h]	215	717	724	18	0	490
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.56	0.80	0.45	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	18.02	11.67	7.85	0.00	0.00	0.00
Movement LOS	C	B	A	A		A
95th-Percentile Queue Length [veh]	1.13	1.94	0.86	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	28.32	48.62	21.41	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	13.14		7.66		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	8.29					
Intersection LOS	C					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #30 New Intersection & MLK Jr Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.453
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	0 0	0	0	1 0 1	1	0 1	0 0
Volume Module:												
Base Vol:	102	0	44	0	0	0	0	421	98	42	178	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	102	0	44	0	0	0	0	421	98	42	178	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	102	0	44	0	0	0	0	421	98	42	178	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	102	0	44	0	0	0	0	421	98	42	178	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	102	0	44	0	0	0	0	421	98	42	178	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	1600	1600	1600	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.00	0.03	0.00	0.00	0.00	0.00	0.26	0.06	0.03	0.11	0.00
Crit Moves:	****							****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #31 Avalon Blvd & New Driveway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.433
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0 0	2	1 0	1 0	0	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	1252	0	0	1600	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1252	0	0	1600	0	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1252	0	0	1600	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1252	0	0	1600	0	0	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1252	0	0	1600	0	0	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	3.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	4800	0	0	4800	0	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****				****							

Existing with Project Conditions 2018
Saturday Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Main St & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.447
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	1 0	1 0	2	0 0	0 0	1!	0 0	1 0	1!	0 0
Volume Module:												
Base Vol:	0	220	178	194	225	0	0	0	0	130	0	162
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	220	178	194	225	0	0	0	0	130	0	162
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	220	178	194	225	0	0	0	0	130	0	162
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	220	178	194	225	0	0	0	0	130	0	162
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	220	178	194	225	0	0	0	0	130	0	162
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.11	0.89	1.00	2.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Final Sat.:	0	1769	1431	1600	3200	0	0	1600	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.12	0.12	0.12	0.07	0.00	0.00	0.00	0.00	0.08	0.00	0.10
Crit Moves:		****		****								****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Main St & 1-405 NB off

Cycle (sec):	100	Critical Vol./Cap.(X):	0.347
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	0 1	0 1	0
Volume Module:												
Base Vol:	14	336	0	0	453	26	0	0	0	61	92	132
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	14	336	0	0	453	26	0	0	0	61	92	132
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	14	336	0	0	453	26	0	0	0	61	92	132
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	336	0	0	453	26	0	0	0	61	92	132
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	14	336	0	0	453	26	0	0	0	61	92	132
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.89	0.11	0.00	0.00	0.00	0.43	0.64	0.93
Final Sat.:	1600	3200	0	0	3026	174	0	0	0	685	1033	1482
Capacity Analysis Module:												
Vol/Sat:	0.01	0.11	0.00	0.00	0.15	0.15	0.00	0.00	0.00	0.04	0.09	0.09
Crit Moves:	****				****						****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Main St & I-405 SB On-Ramp

Cycle (sec):	100	Critical Vol./Cap.(X):	0.356
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	1 0	0 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	339	64	116	397	0	19	77	15	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	339	64	116	397	0	19	77	15	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	339	64	116	397	0	19	77	15	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	339	64	116	397	0	19	77	15	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	339	64	116	397	0	19	77	15	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.68	0.32	1.00	2.00	0.00	1.00	0.84	0.16	0.00	0.00	0.00
Final Sat.:	0	2692	508	1600	3200	0	1600	1339	261	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.13	0.13	0.07	0.12	0.00	0.01	0.06	0.06	0.00	0.00	0.00
Crit Moves:		****		****				****				

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Avalon Blvd & Artesia Blvd/SR 90

Cycle (sec):	100	Critical Vol./Cap.(X):	0.448
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	695	290	113	684	0	0	0	0	394	0	218
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	695	290	113	684	0	0	0	0	394	0	218
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	695	290	113	684	0	0	0	0	394	0	218
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	695	290	113	684	0	0	0	0	394	0	218
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	695	290	113	684	0	0	0	0	394	0	218
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.93	0.00	1.07
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	3090	0	1710
Capacity Analysis Module:												
Vol/Sat:	0.00	0.14	0.18	0.04	0.14	0.00	0.00	0.00	0.00	0.13	0.00	0.13
Crit Moves:			****	****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Avalon Blvd & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.419
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2	1 0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	78	1060	0	0	1007	44	82	0	76	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	78	1060	0	0	1007	44	82	0	76	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	78	1060	0	0	1007	44	82	0	76	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	78	1060	0	0	1007	44	82	0	76	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	78	1060	0	0	1007	44	82	0	76	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.87	0.13	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4599	201	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.22	0.00	0.00	0.22	0.22	0.05	0.00	0.05	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Avalon Blvd & Elsmere Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.515
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	162	983	44	49	930	108	83	0	124	32	0	26
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	162	983	44	49	930	108	83	0	124	32	0	26
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	162	983	44	49	930	108	83	0	124	32	0	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	162	983	44	49	930	108	83	0	124	32	0	26
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	162	983	44	49	930	108	83	0	124	32	0	26
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.87	0.13	1.00	2.69	0.31	1.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	1600	4594	206	1600	4301	499	1600	0	1600	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.21	0.21	0.03	0.22	0.22	0.05	0.00	0.08	0.02	0.00	0.02
Crit Moves:	****				****				****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Avalon Blvd & Turmont St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.470
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 1	0	1 0	3 0	0	0 0	0 0	0 0	1 0	0 1	0
Volume Module:												
Base Vol:	51	1146	149	39	1057	0	0	0	0	121	0	47
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	51	1146	149	39	1057	0	0	0	0	121	0	47
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	51	1146	149	39	1057	0	0	0	0	121	0	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	51	1146	149	39	1057	0	0	0	0	121	0	47
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	51	1146	149	39	1057	0	0	0	0	121	0	47
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.65	0.35	1.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1440	4248	552	1600	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.27	0.27	0.02	0.22	0.00	0.00	0.00	0.00	0.08	0.00	0.03
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Avalon Blvd & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.659
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	160	883	160	258	774	186	242	351	114	239	305	150
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	883	160	258	774	186	242	351	114	239	305	150
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	160	883	160	258	774	186	242	351	114	239	305	150
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	883	160	258	774	186	242	351	114	239	305	150
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	160	883	160	258	774	186	242	351	114	239	305	150
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.42	0.58	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	3200	3870	930	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.18	0.10	0.08	0.20	0.20	0.15	0.11	0.07	0.15	0.10	0.09
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Avalon Blvd & I-405 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.543
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	62	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 1	0 0	1
Volume Module:												
Base Vol:	294	1321	0	0	1121	641	0	0	0	98	0	453
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	294	1321	0	0	1121	641	0	0	0	98	0	453
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	294	1321	0	0	1121	0	0	0	0	98	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	294	1321	0	0	1121	0	0	0	0	98	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	294	1321	0	0	1121	0	0	0	0	98	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	2880	3200	0	0	4800	1600	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.41	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.03	0.00	0.00
Crit Moves:		****								****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avalon Blvd & I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.674
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	2	0 1	2 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	997	129	0	850	347	639	15	368	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	997	129	0	850	347	639	15	368	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	997	129	0	850	347	639	15	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	997	129	0	850	347	639	15	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	0	997	129	0	850	347	639	15	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.77	0.23	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2833	367	0	3200	1600	2880	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.35	0.35	0.00	0.27	0.22	0.22	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****		****			****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 Main St & SR 91 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.295
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0 1			1 0 2		0 0	0 0 0			1 0 0		0 1
Volume Module:												
Base Vol:	0	199	120	35	220	0	0	0	0	117	0	107
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	199	120	35	220	0	0	0	0	117	0	107
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	199	120	35	220	0	0	0	0	117	0	107
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	199	120	35	220	0	0	0	0	117	0	107
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	199	120	35	220	0	0	0	0	117	0	107
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.25	0.75	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	1996	1204	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.10	0.10	0.02	0.07	0.00	0.00	0.00	0.00	0.07	0.00	0.07
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.464
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	50	201	111	159	255	73	36	312	50	82	183	149
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	201	111	159	255	73	36	312	50	82	183	149
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	201	111	159	255	73	36	312	50	82	183	149
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	201	111	159	255	73	36	312	50	82	183	149
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	201	111	159	255	73	36	312	50	82	183	149
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.29	0.71	1.00	1.55	0.45	1.00	1.72	0.28	1.00	1.10	0.90
Final Sat.:	1600	2062	1138	1600	2488	712	1600	2758	442	1600	1764	1436
Capacity Analysis Module:												
Vol/Sat:	0.03	0.10	0.10	0.10	0.10	0.10	0.02	0.11	0.11	0.05	0.10	0.10
Crit Moves:		****				****		****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 I-110 NB On-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.362
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	2	0	1	1	0	1	0	2	0	1
Volume Module:												
Base Vol:	0	0	0	0	0	0	376	698	0	4	461	204
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	376	698	0	4	461	204
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	376	698	0	4	461	204
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	376	698	0	4	461	204
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	376	698	0	4	461	204
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	1600	0	0	0	0	3200	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.22	0.00	0.00	0.14	0.13
Crit Moves:							****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 I-110 SB Off-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.614
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	0 0	2 0	0	0 0	3 0	0
Volume Module:												
Base Vol:	0	0	0	259	0	355	0	936	0	0	500	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	259	0	355	0	936	0	0	500	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	259	0	355	0	936	0	0	500	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	259	0	355	0	936	0	0	500	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	259	0	355	0	936	0	0	500	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.16	0.00	0.22	0.00	0.29	0.00	0.00	0.10	0.00
Crit Moves:						****		****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 SR 91 EB Ramps & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.437
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Street Name:	SR 91 EB Ramps						Albertoni St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	2 0	2 0	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	0	208	0	149	275	272	0	0	291	67
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	208	0	149	275	272	0	0	291	67
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	208	0	149	275	272	0	0	291	67
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	208	0	149	275	272	0	0	291	67
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	208	0	149	275	272	0	0	291	67
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.63	0.37
Final Sat.:	0	0	0	1600	0	1600	2880	3200	0	0	2601	599
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.09	0.10	0.09	0.00	0.00	0.11	0.11
Crit Moves:				****			****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #30 New Intersection & MLK Jr Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.299
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	0 0 0	0	0	1 0 1	1	0 1	0 0
Volume Module:												
Base Vol:	138	0	0	0	0	0	0	84	180	0	48	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	138	0	0	0	0	0	0	84	180	0	48	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	138	0	0	0	0	0	0	84	180	0	48	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	138	0	0	0	0	0	0	84	180	0	48	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	138	0	0	0	0	0	0	84	180	0	48	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	1600	1600	1600	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.11	0.00	0.03	0.00
Crit Moves:	****								****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #31 Avalon Blvd & New Driveway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.341
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0 0	2	1 0	1 0	0	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	1156	0	0	1044	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1156	0	0	1044	0	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1156	0	0	1044	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1156	0	0	1044	0	0	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1156	0	0	1044	0	0	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	3.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	4800	0	0	4800	0	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.24	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****		****								

Future with Project Conditions (County of Los Angeles) 2020 Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Main St & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.638
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0 1	0	1	0 2	0 0	0	0 1!	0 0	1	0 1!	0 0
Volume Module:												
Base Vol:	4	473	189	268	550	0	1	0	3	197	0	258
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	473	189	268	550	0	1	0	3	197	0	258
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	473	189	268	550	0	1	0	3	197	0	258
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	473	189	268	550	0	1	0	3	197	0	258
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	4	473	189	268	550	0	1	0	3	197	0	258
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	1.42	0.57	1.00	2.00	0.00	0.25	0.00	0.75	1.00	0.00	1.00
Final Sat.:	19	2273	908	1600	3200	0	400	0	1200	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.21	0.17	0.17	0.00	0.00	0.00	0.00	0.12	0.00	0.16
Crit Moves:		****		****			****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Main St & 1-405 NB off

Cycle (sec):	100	Critical Vol./Cap.(X):	0.595
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	0 1	0 1	0
Volume Module:												
Base Vol:	28	703	0	0	772	70	0	0	0	106	324	257
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	28	703	0	0	772	70	0	0	0	106	324	257
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	28	703	0	0	772	70	0	0	0	106	324	257
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	28	703	0	0	772	70	0	0	0	106	324	257
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	28	703	0	0	772	70	0	0	0	106	324	257
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.83	0.17	0.00	0.00	0.00	0.31	0.94	0.75
Final Sat.:	1600	3200	0	0	2934	266	0	0	0	494	1509	1197
Capacity Analysis Module:												
Vol/Sat:	0.02	0.22	0.00	0.00	0.26	0.26	0.00	0.00	0.00	0.07	0.21	0.21
Crit Moves:	****				****						****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Main St & I-405 SB On-Ramp

Cycle (sec):	100	Critical Vol./Cap.(X):	0.482
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	1 0	0 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	645	68	163	773	0	29	71	21	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	645	68	163	773	0	29	71	21	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	645	68	163	773	0	29	71	21	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	645	68	163	773	0	29	71	21	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	645	68	163	773	0	29	71	21	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.81	0.19	1.00	2.00	0.00	1.00	0.77	0.23	0.00	0.00	0.00
Final Sat.:	0	2895	305	1600	3200	0	1600	1235	365	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.22	0.10	0.24	0.00	0.02	0.06	0.06	0.00	0.00	0.00
Crit Moves:		****		****				****				

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Main St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.764
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	59	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	73	585	357	65	533	150	128	749	34	265	1049	68
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	73	585	357	65	533	150	128	749	34	265	1049	68
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	73	585	357	65	533	150	128	749	34	265	1049	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	73	585	357	65	533	150	128	749	34	265	1049	68
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	73	585	357	65	533	150	128	749	34	265	1049	68
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.24	0.76	1.00	1.56	0.44	1.00	2.87	0.13	1.00	2.82	0.18
Final Sat.:	1600	1987	1213	1600	2497	703	1600	4592	208	1600	4508	292
Capacity Analysis Module:												
Vol/Sat:	0.05	0.29	0.29	0.04	0.21	0.21	0.08	0.16	0.16	0.17	0.23	0.23
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Main St & Torrance Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.657
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	1 0	2	0 1	0 1	0	0 1	0 0	1!	0 0
Volume Module:												
Base Vol:	314	653	7	13	562	259	318	18	182	13	54	32
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	314	653	7	13	562	259	318	18	182	13	54	32
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	314	653	7	13	562	259	318	18	182	13	54	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	314	653	7	13	562	259	318	18	182	13	54	32
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	314	653	7	13	562	259	318	18	182	13	54	32
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.98	0.02	1.00	2.00	1.00	0.95	0.05	1.00	0.13	0.55	0.32
Final Sat.:	2880	3166	34	1600	3200	1600	1514	86	1600	210	873	517
Capacity Analysis Module:												
Vol/Sat:	0.11	0.21	0.21	0.01	0.18	0.16	0.21	0.21	0.11	0.06	0.06	0.06
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Avalon Blvd & Artesia Blvd/SR 90

Cycle (sec):	100	Critical Vol./Cap.(X):	0.569
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	965	171	177	1149	0	0	0	0	389	0	600
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	965	171	177	1149	0	0	0	0	389	0	600
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	965	171	177	1149	0	0	0	0	389	0	600
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	965	171	177	1149	0	0	0	0	389	0	600
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	965	171	177	1149	0	0	0	0	389	0	600
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.17	0.01	1.82
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	1888	0	2912
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.11	0.06	0.24	0.00	0.00	0.00	0.00	0.21	0.00	0.21
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Avalon Blvd & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.661
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	1 0	1 1	1	1 0	1 1	1
Volume Module:												
Base Vol:	181	780	188	339	772	376	181	129	311	101	20	235
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	181	780	188	339	772	376	181	129	311	101	20	235
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	181	780	188	339	772	376	181	129	311	101	20	235
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	181	780	188	339	772	376	181	129	311	101	20	235
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	181	780	188	339	772	376	181	129	311	101	20	235
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.02	0.98	1.00	1.00	2.00	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3228	1572	1600	1600	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.11	0.16	0.12	0.21	0.24	0.24	0.11	0.08	0.10	0.06	0.01	0.07
Crit Moves:		****		****			****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Avalon Blvd & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.627
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	136	787	216	379	822	78	85	505	81	118	421	221
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	136	787	216	379	822	78	85	505	81	118	421	221
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	136	787	216	379	822	78	85	505	81	118	421	221
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	136	787	216	379	822	78	85	505	81	118	421	221
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	136	787	216	379	822	78	85	505	81	118	421	221
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.74	0.26	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	4384	416	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.16	0.14	0.13	0.19	0.19	0.05	0.16	0.05	0.07	0.13	0.14
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Avalon Blvd & 184th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.417
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	0 0	1! 0	0	1 0	1! 0	1
Volume Module:												
Base Vol:	19	1085	62	37	988	8	57	0	45	8	0	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	19	1085	62	37	988	8	57	0	45	8	0	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	19	1085	62	37	988	8	57	0	45	8	0	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	1085	62	37	988	8	57	0	45	8	0	11
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	19	1085	62	37	988	8	57	0	45	8	0	11
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.98	0.02	0.56	0.00	0.44	1.26	0.00	1.74
Final Sat.:	1600	4800	1600	1600	4761	39	894	0	706	2021	0	2779
Capacity Analysis Module:												
Vol/Sat:	0.01	0.23	0.04	0.02	0.21	0.21	0.06	0.00	0.06	0.00	0.00	0.00
Crit Moves:		****		****					****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Avalon Blvd & University Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.672
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	0 0	1
Volume Module:												
Base Vol:	0	947	484	289	752	0	0	0	0	253	0	271
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	947	484	289	752	0	0	0	0	253	0	271
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	947	484	289	752	0	0	0	0	253	0	271
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	947	484	289	752	0	0	0	0	253	0	271
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	947	484	289	752	0	0	0	0	253	0	271
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.30	0.10	0.16	0.00	0.00	0.00	0.00	0.16	0.00	0.17
Crit Moves:			****	****								****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Avalon Blvd & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.466
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2	1 0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	129	1311	0	0	867	124	126	0	70	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	129	1311	0	0	867	124	126	0	70	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	129	1311	0	0	867	124	126	0	70	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	129	1311	0	0	867	124	126	0	70	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	129	1311	0	0	867	124	126	0	70	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.62	0.38	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4199	601	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.27	0.00	0.00	0.21	0.21	0.08	0.00	0.04	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Avalon Blvd & Elsmere Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.488
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	0	1385	67	35	909	0	1	0	1	102	0	41
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1385	67	35	909	0	1	0	1	102	0	41
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1385	67	35	909	0	1	0	1	102	0	41
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1385	67	35	909	0	1	0	1	102	0	41
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1385	67	35	909	0	1	0	1	102	0	41
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.86	0.14	1.00	3.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	1600	4579	221	1600	4800	0	1600	0	1600	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.30	0.30	0.02	0.19	0.00	0.00	0.00	0.00	0.06	0.00	0.03
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Avalon Blvd & Turmont St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.631
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	1 0	3 0	1	1 0	1 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	217	1341	114	68	872	97	65	9	137	160	13	102
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	217	1341	114	68	872	97	65	9	137	160	13	102
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	217	1341	114	68	872	97	65	9	137	160	13	102
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	217	1341	114	68	872	97	65	9	137	160	13	102
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	217	1341	114	68	872	97	65	9	137	160	13	102
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.76	0.24	1.00	3.00	1.00	1.00	1.00	1.00	1.00	0.11	0.89
Final Sat.:	2880	4424	376	1600	4800	1600	1600	1600	1600	1600	181	1419
Capacity Analysis Module:												
Vol/Sat:	0.08	0.30	0.30	0.04	0.18	0.06	0.04	0.01	0.09	0.10	0.07	0.07
Crit Moves:		****		****					****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Avalon Blvd & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.916
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	109	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	160	1003	134	208	725	320	361	549	97	184	873	127
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	1003	134	208	725	320	361	549	97	184	873	127
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	160	1003	134	208	725	320	361	549	97	184	873	127
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	1003	134	208	725	320	361	549	97	184	873	127
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	160	1003	134	208	725	320	361	549	97	184	873	127
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.08	0.92	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	3330	1470	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.21	0.08	0.07	0.22	0.22	0.23	0.17	0.06	0.12	0.27	0.08
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Avalon Blvd & I-405 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.511
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 1	0 0	1
Volume Module:												
Base Vol:	471	1210	0	0	857	288	0	0	0	105	0	505
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	471	1210	0	0	857	288	0	0	0	105	0	505
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	471	1210	0	0	857	0	0	0	0	105	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	471	1210	0	0	857	0	0	0	0	105	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	471	1210	0	0	857	0	0	0	0	105	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	2880	3200	0	0	4800	1600	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.16	0.38	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.03	0.00	0.00
Crit Moves:		****								****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avalon Blvd & I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.663
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	2	0 1	2 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	26	1105	139	0	610	355	503	32	588	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	26	1105	139	0	610	355	503	32	588	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	26	1105	139	0	610	355	503	32	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	1105	139	0	610	355	503	32	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	26	1105	139	0	610	355	503	32	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.78	0.22	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2842	358	0	3200	1600	2880	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.39	0.39	0.00	0.19	0.22	0.17	0.01	0.00	0.00	0.00	0.00
Crit Moves:		****		****			****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 Main St & SR 91 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.656
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0 1		1 0	1 0 2		0 0	0 0 0		0 0	1 0 0		0 1
Volume Module:												
Base Vol:	0	567	120	65	531	0	0	0	0	481	0	405
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	567	120	65	531	0	0	0	0	481	0	405
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	567	120	65	531	0	0	0	0	481	0	405
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	567	120	65	531	0	0	0	0	481	0	405
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	567	120	65	531	0	0	0	0	481	0	405
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.65	0.35	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	2641	559	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.21	0.04	0.17	0.00	0.00	0.00	0.00	0.30	0.00	0.25
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.723
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	114	418	138	163	471	277	32	302	76	156	419	228
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	114	418	138	163	471	277	32	302	76	156	419	228
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	114	418	138	163	471	277	32	302	76	156	419	228
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	114	418	138	163	471	277	32	302	76	156	419	228
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	114	418	138	163	471	277	32	302	76	156	419	228
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.50	0.50	1.00	1.26	0.74	1.00	1.60	0.40	1.00	1.30	0.70
Final Sat.:	1600	2406	794	1600	2015	1185	1600	2557	643	1600	2072	1128
Capacity Analysis Module:												
Vol/Sat:	0.07	0.17	0.17	0.10	0.23	0.23	0.02	0.12	0.12	0.10	0.20	0.20
Crit Moves:			****		****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Main St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.642
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	129	471	117	62	458	95	68	416	141	184	534	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	129	471	117	62	458	95	68	416	141	184	534	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	129	471	117	62	458	95	68	416	141	184	534	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	129	471	117	62	458	95	68	416	141	184	534	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	129	471	117	62	458	95	68	416	141	184	534	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.66	0.34	1.00	1.49	0.51	1.00	1.63	0.37
Final Sat.:	1600	3200	1600	1600	2650	550	1600	2390	810	1600	2613	587
Capacity Analysis Module:												
Vol/Sat:	0.08	0.15	0.07	0.04	0.17	0.17	0.04	0.17	0.17	0.12	0.20	0.20
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 Figueroa St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.635
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	151	569	89	49	400	120	151	569	144	60	579	76
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	151	569	89	49	400	120	151	569	144	60	579	76
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	151	569	89	49	400	120	151	569	144	60	579	76
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	151	569	89	49	400	120	151	569	144	60	579	76
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	151	569	89	49	400	120	151	569	144	60	579	76
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.73	0.27	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.77	0.23
Final Sat.:	1600	2767	433	1600	3200	1600	1600	3200	1600	1600	2829	371
Capacity Analysis Module:												
Vol/Sat:	0.09	0.21	0.21	0.03	0.13	0.08	0.09	0.18	0.09	0.04	0.20	0.20
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 I-110 NB On-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.388
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	2	0	1	1	0	1	0	2	0	1
Volume Module:												
Base Vol:	0	0	0	0	0	0	162	921	0	0	594	239
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	162	921	0	0	594	239
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	162	921	0	0	594	239
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	162	921	0	0	594	239
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	162	921	0	0	594	239
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	1600	0	0	0	0	3200	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.29	0.00	0.00	0.19	0.15
Crit Moves:								****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 I-110 SB Off-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.802
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	0 0	2 0	0	0 0	3 0	0
Volume Module:												
Base Vol:	0	0	0	281	0	740	0	765	0	0	619	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	281	0	740	0	765	0	0	619	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	281	0	740	0	765	0	0	619	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	281	0	740	0	765	0	0	619	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	281	0	740	0	765	0	0	619	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.18	0.00	0.46	0.00	0.24	0.00	0.00	0.13	0.00
Crit Moves:						****		****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 Central Ave & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.809
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	69	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	2 0	2 0	1	2 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	131	532	23	194	737	673	221	218	131	23	298	117
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	131	532	23	194	737	673	221	218	131	23	298	117
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	131	532	23	194	737	673	221	218	131	23	298	117
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	131	532	23	194	737	673	221	218	131	23	298	117
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	131	532	23	194	737	673	221	218	131	23	298	117
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.25	0.75	1.00	1.44	0.56
Final Sat.:	1600	3200	1600	2880	3200	1600	2880	1999	1201	1600	2298	902
Capacity Analysis Module:												
Vol/Sat:	0.08	0.17	0.01	0.07	0.23	0.42	0.08	0.11	0.11	0.01	0.13	0.13
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 Hamilton Ave & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.607
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	58	130	157	50	63	14	37	293	80	418	737	352
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	58	130	157	50	63	14	37	293	80	418	737	352
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	58	130	157	50	63	14	37	293	80	418	737	352
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	58	130	157	50	63	14	37	293	80	418	737	352
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	58	130	157	50	63	14	37	293	80	418	737	352
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.64	0.36	1.00	1.57	0.43	1.00	1.35	0.65
Final Sat.:	1600	1600	1600	1600	2618	582	1600	2514	686	1600	2166	1034
Capacity Analysis Module:												
Vol/Sat:	0.04	0.08	0.10	0.03	0.02	0.02	0.02	0.12	0.12	0.26	0.34	0.34
Crit Moves:			****	****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #25 Hamilton Ave & I-110 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.725
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ignore			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	0 1	0	1 1	0 0	0 0	0	0 0	1	0	1! 0 0
Volume Module:												
Base Vol:	0	79	110	372	95	0	0	0	0	773	0	325
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	79	110	372	95	0	0	0	0	773	0	325
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	79	0	372	95	0	0	0	0	773	0	325
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	79	0	372	95	0	0	0	0	773	0	325
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	79	0	372	95	0	0	0	0	773	0	325
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.41	0.00	0.59
Final Sat.:	0	1600	1600	1600	1600	0	0	0	0	2253	0	947
Capacity Analysis Module:												
Vol/Sat:	0.00	0.05	0.00	0.23	0.06	0.00	0.00	0.00	0.00	0.34	0.00	0.34
Crit Moves:		****		****						****		

Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	All-way stop	Delay (sec / veh):	57.7
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.093

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	79	110	372	95	773	325
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	79	110	372	95	773	325
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	28	93	24	193	81
Total Analysis Volume [veh/h]	79	110	372	95	773	325
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	459	503	456	486	549	558
Degree of Utilization, x	0.17	0.22	0.82	0.20	1.09	0.98

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.62	0.83	7.69	0.72	17.55	13.81
95th-Percentile Queue Length [ft]	15.42	20.66	192.24	17.96	438.81	345.36
Approach Delay [s/veh]	11.99		32.05		76.44	
Approach LOS	B		D		F	
Intersection Delay [s/veh]	57.67					
Intersection LOS	F					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 Figueroa St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.752
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	193	641	378	50	347	349	56	381	77	172	891	97
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	193	641	378	50	347	349	56	381	77	172	891	97
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	193	641	378	50	347	349	56	381	77	172	891	97
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	193	641	378	50	347	349	56	381	77	172	891	97
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	193	641	378	50	347	349	56	381	77	172	891	97
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.66	0.34	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	2662	538	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.12	0.20	0.24	0.03	0.11	0.22	0.04	0.14	0.14	0.11	0.28	0.06
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 Figueroa St & I-110 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.726
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	2 0	1	1 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	685	599	0	0	411	193	607	0	223	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	685	599	0	0	411	193	607	0	223	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	685	599	0	0	411	193	607	0	223	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	685	599	0	0	411	193	607	0	223	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	685	599	0	0	411	193	607	0	223	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	2.00	1.00	1.46	0.00	0.54	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	3200	1600	2340	0	860	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.24	0.19	0.00	0.00	0.13	0.12	0.26	0.00	0.26	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 SR 91 EB Ramps & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.554
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Street Name:	SR 91 EB Ramps						Albertoni St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	2 0	2 0	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	0	278	0	267	281	328	0	0	495	88
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	278	0	267	281	328	0	0	495	88
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	278	0	267	281	328	0	0	495	88
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	278	0	267	281	328	0	0	495	88
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	278	0	267	281	328	0	0	495	88
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.70	0.30
Final Sat.:	0	0	0	1600	0	1600	2880	3200	0	0	2717	483
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.17	0.00	0.17	0.10	0.10	0.00	0.00	0.18	0.18
Crit Moves:				****			****				****	

Intersection Level Of Service Report
Intersection 29: Main Street & Broadway

Control Type:	Two-way stop	Delay (sec / veh):	19.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.694

Intersection Setup

Name	Main Street		Main Street		Broadway	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Main Street		Main Street		Broadway	
Base Volume Input [veh/h]	269	739	728	5	0	184
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	269	739	728	5	0	184
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	67	185	182	1	0	46
Total Analysis Volume [veh/h]	269	739	728	5	0	184
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.69	0.82	0.45	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	19.13	11.81	7.86	0.00	0.00	0.00
Movement LOS	C	B	A	A		A
95th-Percentile Queue Length [veh]	1.52	2.04	0.86	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	38.00	51.05	21.56	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	13.76		7.80		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	10.18					
Intersection LOS	C					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #30 New Intersection & MLK Jr Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.401
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	0 0	0	0	1 0 1	1	0 1	0 0
Volume Module:												
Base Vol:	183	0	29	0	0	0	0	189	260	38	252	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	183	0	29	0	0	0	0	189	260	38	252	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	183	0	29	0	0	0	0	189	260	38	252	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	183	0	29	0	0	0	0	189	260	38	252	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	183	0	29	0	0	0	0	189	260	38	252	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	1600	1600	1600	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.11	0.00	0.02	0.00	0.00	0.00	0.00	0.12	0.16	0.02	0.16	0.00
Crit Moves:	****								****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #31 Avalon Blvd & New Driveway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.432
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0 0	2	1 0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	90	1424	0	0	950	51	31	0	57	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	1424	0	0	950	51	31	0	57	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	1424	0	0	950	51	31	0	57	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	1424	0	0	950	51	31	0	57	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	1424	0	0	950	51	31	0	57	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	2.85	0.15	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	4800	0	0	4555	245	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.30	0.00	0.00	0.21	0.21	0.02	0.00	0.04	0.00	0.00	0.00
Crit Moves:		****		****					****			

Future with Project Conditions (County of Los Angeles) 2020 Afternoon Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Main St & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.885
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	93	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0 1	0	1	0 2	0 0	0	0 0	0 1	1	0 1!	0 0
Volume Module:												
Base Vol:	2	538	318	487	686	0	0	0	3	181	0	340
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	538	318	487	686	0	0	0	3	181	0	340
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	538	318	487	686	0	0	0	3	181	0	340
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	538	318	487	686	0	0	0	3	181	0	340
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	538	318	487	686	0	0	0	3	181	0	340
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	1.25	0.74	1.00	2.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	7	2007	1186	1600	3200	0	0	0	1600	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.27	0.27	0.30	0.21	0.00	0.00	0.00	0.00	0.11	0.00	0.21
Crit Moves:		****		****			****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Main St & 1-405 NB off

Cycle (sec):	100	Critical Vol./Cap.(X):	0.737
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	0 1	0 1	0
Volume Module:												
Base Vol:	21	735	0	0	1349	92	0	0	0	101	121	277
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	735	0	0	1349	92	0	0	0	101	121	277
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	21	735	0	0	1349	92	0	0	0	101	121	277
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	21	735	0	0	1349	92	0	0	0	101	121	277
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	21	735	0	0	1349	92	0	0	0	101	121	277
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.87	0.13	0.00	0.00	0.00	0.40	0.60	1.00
Final Sat.:	1600	3200	0	0	2996	204	0	0	0	648	952	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.23	0.00	0.00	0.45	0.45	0.00	0.00	0.00	0.06	0.13	0.17
Crit Moves:	****				****							****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Main St & I-405 SB On-Ramp

Cycle (sec):	100	Critical Vol./Cap.(X):	0.761
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	59	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	1 0	0 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	700	149	315	1135	0	61	276	42	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	700	149	315	1135	0	61	276	42	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	700	149	315	1135	0	61	276	42	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	700	149	315	1135	0	61	276	42	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	700	149	315	1135	0	61	276	42	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.65	0.35	1.00	2.00	0.00	1.00	0.87	0.13	0.00	0.00	0.00
Final Sat.:	0	2638	562	1600	3200	0	1600	1389	211	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.27	0.27	0.20	0.35	0.00	0.04	0.20	0.20	0.00	0.00	0.00
Crit Moves:		****		****				****				

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Main St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.017
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	35	491	414	153	867	186	230	1407	102	358	1003	116
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	35	491	414	153	867	186	230	1407	102	358	1003	116
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	35	491	414	153	867	186	230	1407	102	358	1003	116
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	491	414	153	867	186	230	1407	102	358	1003	116
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	35	491	414	153	867	186	230	1407	102	358	1003	116
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.09	0.91	1.00	1.65	0.35	1.00	2.80	0.20	1.00	2.69	0.31
Final Sat.:	1600	1736	1464	1600	2635	565	1600	4476	324	1600	4302	498
Capacity Analysis Module:												
Vol/Sat:	0.02	0.28	0.28	0.10	0.33	0.33	0.14	0.31	0.31	0.22	0.23	0.23
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Main St & Torrance Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.783
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	1 0	2 0	1	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	189	477	11	38	885	364	438	57	483	6	17	27
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	189	477	11	38	885	364	438	57	483	6	17	27
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	189	477	11	38	885	364	438	57	483	6	17	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	189	477	11	38	885	364	438	57	483	6	17	27
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	189	477	11	38	885	364	438	57	483	6	17	27
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.95	0.05	1.00	2.00	1.00	0.88	0.12	1.00	0.12	0.34	0.54
Final Sat.:	2880	3128	72	1600	3200	1600	1416	184	1600	192	544	864
Capacity Analysis Module:												
Vol/Sat:	0.07	0.15	0.15	0.02	0.28	0.23	0.31	0.31	0.30	0.03	0.03	0.03
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Avalon Blvd & Artesia Blvd/SR 90

Cycle (sec):	100	Critical Vol./Cap.(X):	0.600
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	1260	243	163	1164	0	0	0	0	421	0	449
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1260	243	163	1164	0	0	0	0	421	0	449
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1260	243	163	1164	0	0	0	0	421	0	449
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1260	243	163	1164	0	0	0	0	421	0	449
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1260	243	163	1164	0	0	0	0	421	0	449
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.45	0.00	1.55
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	2323	0	2477
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.15	0.06	0.24	0.00	0.00	0.00	0.00	0.18	0.00	0.18
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Avalon Blvd & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.910
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	105	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	1 0	1 1	1	1 0	1 1	1
Volume Module:												
Base Vol:	243	1003	210	261	1063	263	287	797	586	150	21	189
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	243	1003	210	261	1063	263	287	797	586	150	21	189
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	243	1003	210	261	1063	263	287	797	586	150	21	189
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	243	1003	210	261	1063	263	287	797	586	150	21	189
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	243	1003	210	261	1063	263	287	797	586	150	21	189
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.40	0.60	1.00	1.73	1.27	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3848	952	1600	2766	2034	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.15	0.21	0.13	0.16	0.28	0.28	0.18	0.29	0.29	0.09	0.01	0.06
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Avalon Blvd & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.808
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	69	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	156	997	255	427	1199	85	114	662	158	218	712	353
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	156	997	255	427	1199	85	114	662	158	218	712	353
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	156	997	255	427	1199	85	114	662	158	218	712	353
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	156	997	255	427	1199	85	114	662	158	218	712	353
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	156	997	255	427	1199	85	114	662	158	218	712	353
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.80	0.20	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	4482	318	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.21	0.16	0.15	0.27	0.27	0.07	0.21	0.10	0.14	0.22	0.22
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Avalon Blvd & 184th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.524
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	0 0	1! 0	0	1 0	1! 0	1
Volume Module:												
Base Vol:	34	1284	39	55	1494	33	73	0	30	50	0	48
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	34	1284	39	55	1494	33	73	0	30	50	0	48
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	34	1284	39	55	1494	33	73	0	30	50	0	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	34	1284	39	55	1494	33	73	0	30	50	0	48
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	34	1284	39	55	1494	33	73	0	30	50	0	48
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.94	0.06	0.71	0.00	0.29	1.53	xxxx	1.47
Final Sat.:	1600	4800	1600	1600	4696	104	1134	0	466	2449	0	2351
Capacity Analysis Module:												
Vol/Sat:	0.02	0.27	0.02	0.03	0.32	0.32	0.06	0.00	0.06	0.02	0.00	0.02
Crit Moves:	****				****		****			****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Avalon Blvd & University Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.775
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	61	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	0 0	1
Volume Module:												
Base Vol:	0	1165	353	351	1300	0	0	0	0	496	0	233
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1165	353	351	1300	0	0	0	0	496	0	233
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1165	353	351	1300	0	0	0	0	496	0	233
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1165	353	351	1300	0	0	0	0	496	0	233
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1165	353	351	1300	0	0	0	0	496	0	233
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.24	0.22	0.12	0.27	0.00	0.00	0.00	0.00	0.31	0.00	0.15
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Avalon Blvd & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.689
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2	1 0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	110	1268	0	0	1674	120	235	0	198	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	1268	0	0	1674	120	235	0	198	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	1268	0	0	1674	120	235	0	198	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	1268	0	0	1674	120	235	0	198	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	110	1268	0	0	1674	120	235	0	198	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.80	0.20	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4479	321	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.26	0.00	0.00	0.37	0.37	0.15	0.00	0.12	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Avalon Blvd & Elsmere Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.543
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	38	1323	72	60	1746	64	30	0	18	35	1	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	38	1323	72	60	1746	64	30	0	18	35	1	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	38	1323	72	60	1746	64	30	0	18	35	1	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	38	1323	72	60	1746	64	30	0	18	35	1	36
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	38	1323	72	60	1746	64	30	0	18	35	1	36
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.85	0.15	1.00	2.89	0.11	1.00	0.00	1.00	1.00	0.03	0.97
Final Sat.:	1600	4552	248	1600	4630	170	1600	0	1600	1600	43	1557
Capacity Analysis Module:												
Vol/Sat:	0.02	0.29	0.29	0.04	0.38	0.38	0.02	0.00	0.01	0.02	0.02	0.02
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Avalon Blvd & Turmont St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.672
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	1 0	3 0	1	1 0	1 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	222	1374	193	103	1720	92	64	14	135	84	16	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	222	1374	193	103	1720	92	64	14	135	84	16	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	222	1374	193	103	1720	92	64	14	135	84	16	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	222	1374	193	103	1720	92	64	14	135	84	16	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	222	1374	193	103	1720	92	64	14	135	84	16	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.63	0.37	1.00	3.00	1.00	1.00	1.00	1.00	1.00	0.21	0.79
Final Sat.:	2880	4209	591	1600	4800	1600	1600	1600	1600	1600	337	1263
Capacity Analysis Module:												
Vol/Sat:	0.08	0.33	0.33	0.06	0.36	0.06	0.04	0.01	0.08	0.05	0.05	0.05
Crit Moves:	****				****				****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Avalon Blvd & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.999
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	171	1169	179	330	1122	426	346	998	243	253	652	192
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	171	1169	179	330	1122	426	346	998	243	253	652	192
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	171	1169	179	330	1122	426	346	998	243	253	652	192
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	171	1169	179	330	1122	426	346	998	243	253	652	192
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	171	1169	179	330	1122	426	346	998	243	253	652	192
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.17	0.83	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	3479	1321	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.24	0.11	0.11	0.32	0.32	0.22	0.31	0.15	0.16	0.20	0.12
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Avalon Blvd & I-405 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.594
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 1	0 0	1
Volume Module:												
Base Vol:	345	1199	0	0	1516	534	0	0	0	185	2	513
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	345	1199	0	0	1516	534	0	0	0	185	2	513
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	345	1199	0	0	1516	0	0	0	0	185	2	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	345	1199	0	0	1516	0	0	0	0	185	2	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	345	1199	0	0	1516	0	0	0	0	185	2	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.98	0.02	1.00
Final Sat.:	2880	3200	0	0	4800	1600	0	0	0	3166	34	1600
Capacity Analysis Module:												
Vol/Sat:	0.12	0.37	0.00	0.00	0.32	0.00	0.00	0.00	0.00	0.06	0.06	0.00
Crit Moves:	****				****					****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avalon Blvd & I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.641
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	2	0 1	2 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	53	1161	184	0	1172	533	348	224	454	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	53	1161	184	0	1172	533	348	224	454	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	53	1161	184	0	1172	533	348	224	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	53	1161	184	0	1172	533	348	224	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	53	1161	184	0	1172	533	348	224	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.73	0.27	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2762	438	0	3200	1600	2880	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.42	0.42	0.00	0.37	0.33	0.12	0.07	0.00	0.00	0.00	0.00
Crit Moves:		****		****			****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 Main St & SR 91 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.620
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	1	638	157	108	795	0	0	0	0	257	0	326
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	638	157	108	795	0	0	0	0	257	0	326
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	638	157	108	795	0	0	0	0	257	0	326
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	638	157	108	795	0	0	0	0	257	0	326
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	1	638	157	108	795	0	0	0	0	257	0	326
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.61	0.39	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	2568	632	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.25	0.07	0.25	0.00	0.00	0.00	0.00	0.16	0.00	0.20
Crit Moves:		****		****								****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.927
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	116	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	109	496	153	223	678	170	58	648	150	176	247	236
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	109	496	153	223	678	170	58	648	150	176	247	236
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	109	496	153	223	678	170	58	648	150	176	247	236
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	109	496	153	223	678	170	58	648	150	176	247	236
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	109	496	153	223	678	170	58	648	150	176	247	236
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.53	0.47	1.00	1.60	0.40	1.00	1.62	0.38	1.00	1.02	0.98
Final Sat.:	1600	2446	754	1600	2558	642	1600	2598	602	1600	1636	1564
Capacity Analysis Module:												
Vol/Sat:	0.07	0.20	0.20	0.14	0.26	0.27	0.04	0.25	0.25	0.11	0.15	0.15
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Main St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.934
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	121	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	191	450	161	163	728	86	81	1004	215	127	638	136
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	191	450	161	163	728	86	81	1004	215	127	638	136
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	191	450	161	163	728	86	81	1004	215	127	638	136
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	191	450	161	163	728	86	81	1004	215	127	638	136
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	191	450	161	163	728	86	81	1004	215	127	638	136
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.79	0.21	1.00	1.65	0.35	1.00	1.65	0.35
Final Sat.:	1600	3200	1600	1600	2862	338	1600	2636	564	1600	2638	562
Capacity Analysis Module:												
Vol/Sat:	0.12	0.14	0.10	0.10	0.25	0.25	0.05	0.38	0.38	0.08	0.24	0.24
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 Figueroa St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.748
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2 0	1	1 0	2 0	1	1 0	1	1 0
Volume Module:												
Base Vol:	105	500	144	74	715	107	114	1018	219	67	834	87
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	105	500	144	74	715	107	114	1018	219	67	834	87
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	105	500	144	74	715	107	114	1018	219	67	834	87
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	105	500	144	74	715	107	114	1018	219	67	834	87
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	105	500	144	74	715	107	114	1018	219	67	834	87
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.55	0.45	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.81	0.19
Final Sat.:	1600	2484	716	1600	3200	1600	1600	3200	1600	1600	2898	302
Capacity Analysis Module:												
Vol/Sat:	0.07	0.20	0.20	0.05	0.22	0.07	0.07	0.32	0.14	0.04	0.29	0.29
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 I-110 NB On-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.525
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	2	0	1	1	0	1	0	2	0	1
Volume Module:												
Base Vol:	0	0	0	0	0	0	455	1361	0	0	755	335
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	455	1361	0	0	755	335
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	455	1361	0	0	755	335
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	455	1361	0	0	755	335
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	455	1361	0	0	755	335
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	1600	0	0	0	0	3200	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.43	0.00	0.00	0.24	0.21
Crit Moves:								****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 I-110 SB Off-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.838
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	76	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	0 0	2 0	0	0 0	3 0	0
Volume Module:												
Base Vol:	0	0	0	394	0	466	0	1430	0	0	749	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	394	0	466	0	1430	0	0	749	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	394	0	466	0	1430	0	0	749	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	394	0	466	0	1430	0	0	749	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	394	0	466	0	1430	0	0	749	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.25	0.00	0.29	0.00	0.45	0.00	0.00	0.16	0.00
Crit Moves:						****		****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 Central Ave & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.763
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	59	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	2 0	2 0	1	2 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	152	533	35	174	656	336	504	713	215	18	374	211
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	152	533	35	174	656	336	504	713	215	18	374	211
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	152	533	35	174	656	336	504	713	215	18	374	211
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	152	533	35	174	656	336	504	713	215	18	374	211
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	152	533	35	174	656	336	504	713	215	18	374	211
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.54	0.46	1.00	1.28	0.72
Final Sat.:	1600	3200	1600	2880	3200	1600	2880	2459	741	1600	2046	1154
Capacity Analysis Module:												
Vol/Sat:	0.10	0.17	0.02	0.06	0.21	0.21	0.17	0.29	0.29	0.01	0.18	0.18
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 Hamilton Ave & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.949
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	133	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	24	34	282	292	315	62	13	641	197	366	502	97
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	24	34	282	292	315	62	13	641	197	366	502	97
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	24	34	282	292	315	62	13	641	197	366	502	97
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	34	282	292	315	62	13	641	197	366	502	97
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	24	34	282	292	315	62	13	641	197	366	502	97
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.67	0.33	1.00	1.53	0.47	1.00	1.68	0.32
Final Sat.:	1600	1600	1600	1600	2674	526	1600	2448	752	1600	2682	518
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.18	0.18	0.12	0.12	0.01	0.26	0.26	0.23	0.19	0.19
Crit Moves:			****	****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #25 Hamilton Ave & I-110 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.781
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ignore			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	0 1	0	1 1	0 0	0 0	0	0 0	1 0	1!	0 0
Volume Module:												
Base Vol:	0	61	534	733	169	0	0	0	0	331	0	260
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	61	534	733	169	0	0	0	0	331	0	260
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	61	0	733	169	0	0	0	0	331	0	260
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	61	0	733	169	0	0	0	0	331	0	260
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	61	0	733	169	0	0	0	0	331	0	260
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.12	0.00	0.88
Final Sat.:	0	1600	1600	1600	1600	0	0	0	0	1792	0	1408
Capacity Analysis Module:												
Vol/Sat:	0.00	0.04	0.00	0.46	0.11	0.00	0.00	0.00	0.00	0.18	0.00	0.18
Crit Moves:		****		****						****		

Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	All-way stop	Delay (sec / veh):	133.5
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.613

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	61	534	733	169	331	260
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	61	534	733	169	331	260
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	134	183	42	83	65
Total Analysis Volume [veh/h]	61	534	733	169	331	260
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	475	534	733	485	439	504
Degree of Utilization, x	0.13	1.02	1.61	0.35	0.67	0.59

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.44	14.86	41.46	1.54	4.86	3.73
95th-Percentile Queue Length [ft]	10.97	371.57	1036.51	38.61	121.44	93.22
Approach Delay [s/veh]	64.73		251.35		22.84	
Approach LOS	F		F		C	
Intersection Delay [s/veh]	133.49					
Intersection LOS	F					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 Figueroa St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.053
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	63	407	410	185	693	206	68	1033	132	348	693	87
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	63	407	410	185	693	206	68	1033	132	348	693	87
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	63	407	410	185	693	206	68	1033	132	348	693	87
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	63	407	410	185	693	206	68	1033	132	348	693	87
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	63	407	410	185	693	206	68	1033	132	348	693	87
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.77	0.23	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	2837	363	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.26	0.12	0.22	0.13	0.04	0.36	0.36	0.22	0.22	0.05
Crit Moves:			****	****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 Figueroa St & I-110 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.739
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	2 0	1	1 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	503	420	0	0	888	302	460	0	138	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	503	420	0	0	888	302	460	0	138	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	503	420	0	0	888	302	460	0	138	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	503	420	0	0	888	302	460	0	138	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	503	420	0	0	888	302	460	0	138	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	2.00	1.00	1.54	0.00	0.46	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	3200	1600	2462	0	738	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.17	0.13	0.00	0.00	0.28	0.19	0.19	0.00	0.19	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 SR 91 EB Ramps & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.621
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Street Name:	SR 91 EB Ramps						Albertoni St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	2 0	2 0	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	0	426	0	363	229	815	0	0	352	62
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	426	0	363	229	815	0	0	352	62
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	426	0	363	229	815	0	0	352	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	426	0	363	229	815	0	0	352	62
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	426	0	363	229	815	0	0	352	62
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.70	0.30
Final Sat.:	0	0	0	1600	0	1600	2880	3200	0	0	2721	479
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.27	0.00	0.23	0.08	0.25	0.00	0.00	0.13	0.13
Crit Moves:				****				****		****		

Intersection Level Of Service Report
Intersection 29: Main Street & Broadway

Control Type:	Two-way stop	Delay (sec / veh):	20.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.620

Intersection Setup

Name	Main Street		Main Street		Broadway	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Main Street		Main Street		Broadway	
Base Volume Input [veh/h]	215	780	797	18	0	490
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	215	780	797	18	0	490
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	54	195	199	5	0	123
Total Analysis Volume [veh/h]	215	780	797	18	0	490
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.62	0.87	0.49	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	19.96	12.08	7.94	0.00	0.00	0.00
Movement LOS	C	B	A	A		A
95th-Percentile Queue Length [veh]	1.29	2.23	0.97	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	32.27	55.84	24.25	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	13.78		7.76		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	8.71					
Intersection LOS	C					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #30 New Intersection & MLK Jr Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.621
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	0 0	0	0	1 0 1	1	0 1	0 0
Volume Module:												
Base Vol:	352	0	55	0	0	0	0	428	350	53	178	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	352	0	55	0	0	0	0	428	350	53	178	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	352	0	55	0	0	0	0	428	350	53	178	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	352	0	55	0	0	0	0	428	350	53	178	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	352	0	55	0	0	0	0	428	350	53	178	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	1600	1600	1600	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.22	0.00	0.03	0.00	0.00	0.00	0.00	0.27	0.22	0.03	0.11	0.00
Crit Moves:	****							****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #31 Avalon Blvd & New Driveway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.633
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0 0	2	1 0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	161	1353	0	0	1745	83	84	0	163	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	161	1353	0	0	1745	83	84	0	163	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	161	1353	0	0	1745	83	84	0	163	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	161	1353	0	0	1745	83	84	0	163	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	161	1353	0	0	1745	83	84	0	163	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	2.86	0.14	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	4800	0	0	4582	218	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.28	0.00	0.00	0.38	0.38	0.05	0.00	0.10	0.00	0.00	0.00
Crit Moves:	****				****				****			

Future with Project Conditions
(County of Los Angeles) 2020
Saturday Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Main St & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.820
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	71	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	1 0	1	0 2	0 0	0 0	1!	0 0	1 0	1!	0 0
Volume Module:												
Base Vol:	0	301	239	448	312	0	0	0	0	197	0	434
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	301	239	448	312	0	0	0	0	197	0	434
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	301	239	448	312	0	0	0	0	197	0	434
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	301	239	448	312	0	0	0	0	197	0	434
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	301	239	448	312	0	0	0	0	197	0	434
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.11	0.89	1.00	2.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Final Sat.:	0	1784	1416	1600	3200	0	0	1600	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.17	0.28	0.10	0.00	0.00	0.00	0.00	0.12	0.00	0.27
Crit Moves:		****		****								****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Main St & 1-405 NB off

Cycle (sec):	100	Critical Vol./Cap.(X):	0.468
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	0 1	0 1	0
Volume Module:												
Base Vol:	14	432	0	0	607	26	0	0	0	258	92	178
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	14	432	0	0	607	26	0	0	0	258	92	178
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	14	432	0	0	607	26	0	0	0	258	92	178
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	432	0	0	607	26	0	0	0	258	92	178
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	14	432	0	0	607	26	0	0	0	258	92	178
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.92	0.08	0.00	0.00	0.00	0.98	0.35	0.67
Final Sat.:	1600	3200	0	0	3069	131	0	0	0	1564	558	1079
Capacity Analysis Module:												
Vol/Sat:	0.01	0.14	0.00	0.00	0.20	0.20	0.00	0.00	0.00	0.16	0.16	0.16
Crit Moves:	****				****					****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Main St & I-405 SB On-Ramp

Cycle (sec):	100	Critical Vol./Cap.(X):	0.474
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	1 0	0 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	435	247	166	698	0	19	77	15	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	435	247	166	698	0	19	77	15	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	435	247	166	698	0	19	77	15	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	435	247	166	698	0	19	77	15	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	435	247	166	698	0	19	77	15	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.28	0.72	1.00	2.00	0.00	1.00	0.84	0.16	0.00	0.00	0.00
Final Sat.:	0	2041	1159	1600	3200	0	1600	1339	261	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.21	0.10	0.22	0.00	0.01	0.06	0.06	0.00	0.00	0.00
Crit Moves:		****		****				****				

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Avalon Blvd & Artesia Blvd/SR 90

Cycle (sec):	100	Critical Vol./Cap.(X):	0.476
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	881	306	113	876	0	0	0	0	467	0	218
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	881	306	113	876	0	0	0	0	467	0	218
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	881	306	113	876	0	0	0	0	467	0	218
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	881	306	113	876	0	0	0	0	467	0	218
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	881	306	113	876	0	0	0	0	467	0	218
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.18	0.19	0.04	0.18	0.00	0.00	0.00	0.00	0.15	0.00	0.14
Crit Moves:			****	****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Avalon Blvd & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.493
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2	1 0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	73	1373	0	0	1331	53	94	0	74	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	73	1373	0	0	1331	53	94	0	74	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	73	1373	0	0	1331	53	94	0	74	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	73	1373	0	0	1331	53	94	0	74	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	73	1373	0	0	1331	53	94	0	74	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.89	0.11	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4616	184	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.29	0.00	0.00	0.29	0.29	0.06	0.00	0.05	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Avalon Blvd & Elsmere Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.588
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	162	1292	53	49	1252	108	83	0	124	41	0	26
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	162	1292	53	49	1252	108	83	0	124	41	0	26
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	162	1292	53	49	1252	108	83	0	124	41	0	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	162	1292	53	49	1252	108	83	0	124	41	0	26
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	162	1292	53	49	1252	108	83	0	124	41	0	26
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.88	0.12	1.00	2.76	0.24	1.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	1600	4611	189	1600	4419	381	1600	0	1600	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.28	0.28	0.03	0.28	0.28	0.05	0.00	0.08	0.03	0.00	0.02
Crit Moves:	****				****				****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Avalon Blvd & Turmont St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.628
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	1 0	3 0	1	1 0	1 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	200	1497	149	39	1438	73	64	19	134	121	18	46
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	200	1497	149	39	1438	73	64	19	134	121	18	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	200	1497	149	39	1438	73	64	19	134	121	18	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	200	1497	149	39	1438	73	64	19	134	121	18	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	200	1497	149	39	1438	73	64	19	134	121	18	46
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.73	0.27	1.00	3.00	1.00	1.00	1.00	1.00	1.00	0.28	0.72
Final Sat.:	2880	4365	435	1600	4800	1600	1600	1600	1600	1600	450	1150
Capacity Analysis Module:												
Vol/Sat:	0.07	0.34	0.34	0.02	0.30	0.05	0.04	0.01	0.08	0.08	0.04	0.04
Crit Moves:	****				****				****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Avalon Blvd & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.041
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	327	1109	160	304	1004	426	472	498	269	239	461	194
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	327	1109	160	304	1004	426	472	498	269	239	461	194
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	327	1109	160	304	1004	426	472	498	269	239	461	194
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	327	1109	160	304	1004	426	472	498	269	239	461	194
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	327	1109	160	304	1004	426	472	498	269	239	461	194
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.11	0.89	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	3370	1430	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.20	0.23	0.10	0.11	0.30	0.30	0.30	0.16	0.17	0.15	0.14	0.12
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Avalon Blvd & I-405 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.722
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 1	0 0	1
Volume Module:												
Base Vol:	526	1548	0	0	1468	708	0	0	0	426	0	644
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	526	1548	0	0	1468	708	0	0	0	426	0	644
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	526	1548	0	0	1468	0	0	0	0	426	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	526	1548	0	0	1468	0	0	0	0	426	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	526	1548	0	0	1468	0	0	0	0	426	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	2880	3200	0	0	4800	1600	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.18	0.48	0.00	0.00	0.31	0.00	0.00	0.00	0.00	0.13	0.00	0.00
Crit Moves:	****				****					****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avalon Blvd & I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	1.113
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0 1			1 0			0 0 2		0 1	2 0 2		0 1	0 0		0 0 0
Volume Module:												
Base Vol:	278	1186	177	0	1032	838	909	273	679	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	278	1186	177	0	1032	838	909	273	679	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	278	1186	177	0	1032	838	909	273	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	278	1186	177	0	1032	838	909	273	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	278	1186	177	0	1032	838	909	273	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.74	0.26	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2784	416	0	3200	1600	2880	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.17	0.43	0.43	0.00	0.32	0.52	0.32	0.09	0.00	0.00	0.00	0.00
Crit Moves:	****					****	****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 Main St & SR 91 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.357
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	0	324	161	35	349	0	0	0	0	134	0	107
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	324	161	35	349	0	0	0	0	134	0	107
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	324	161	35	349	0	0	0	0	134	0	107
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	324	161	35	349	0	0	0	0	134	0	107
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	324	161	35	349	0	0	0	0	134	0	107
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.34	0.66	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	2138	1062	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.15	0.15	0.02	0.11	0.00	0.00	0.00	0.00	0.08	0.00	0.07
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.596
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	50	364	130	161	399	73	36	312	50	129	183	151
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	364	130	161	399	73	36	312	50	129	183	151
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	364	130	161	399	73	36	312	50	129	183	151
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	364	130	161	399	73	36	312	50	129	183	151
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	364	130	161	399	73	36	312	50	129	183	151
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.47	0.53	1.00	1.69	0.31	1.00	1.72	0.28	1.00	1.10	0.90
Final Sat.:	1600	2358	842	1600	2705	495	1600	2758	442	1600	1753	1447
Capacity Analysis Module:												
Vol/Sat:	0.03	0.15	0.15	0.10	0.15	0.15	0.02	0.11	0.11	0.08	0.10	0.10
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 I-110 NB On-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.416
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	2	0	1	1	0	1	0	2	0	1
Volume Module:												
Base Vol:	0	0	0	0	0	0	380	871	0	4	541	316
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	380	871	0	4	541	316
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	380	871	0	4	541	316
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	380	871	0	4	541	316
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	380	871	0	4	541	316
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	1600	0	0	0	0	3200	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.27	0.00	0.00	0.17	0.20
Crit Moves:							****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 I-110 SB Off-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.640
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	0 0	2 0	0	0 0	3 0	0
Volume Module:												
Base Vol:	0	0	0	354	0	360	0	1019	0	0	580	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	354	0	360	0	1019	0	0	580	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	354	0	360	0	1019	0	0	580	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	354	0	360	0	1019	0	0	580	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	354	0	360	0	1019	0	0	580	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.22	0.00	0.23	0.00	0.32	0.00	0.00	0.12	0.00
Crit Moves:				****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 SR 91 EB Ramps & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.443
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Street Name:	SR 91 EB Ramps						Albertoni St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	2 0	2 0	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	0	207	0	194	292	272	0	0	291	67
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	207	0	194	292	272	0	0	291	67
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	207	0	194	292	272	0	0	291	67
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	207	0	194	292	272	0	0	291	67
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	207	0	194	292	272	0	0	291	67
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.63	0.37
Final Sat.:	0	0	0	1600	0	1600	2880	3200	0	0	2601	599
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.12	0.10	0.09	0.00	0.00	0.11	0.11
Crit Moves:				****			****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #30 New Intersection & MLK Jr Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.740
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	0 0	0	0	1 0 1	1	0 1	0 0
Volume Module:												
Base Vol:	496	0	17	0	0	0	0	84	512	16	46	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	496	0	17	0	0	0	0	84	512	16	46	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	496	0	17	0	0	0	0	84	512	16	46	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	496	0	17	0	0	0	0	84	512	16	46	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	496	0	17	0	0	0	0	84	512	16	46	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	1600	1600	1600	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.31	0.00	0.01	0.00	0.00	0.00	0.00	0.05	0.32	0.01	0.03	0.00
Crit Moves:	****								****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #31 Avalon Blvd & New Driveway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.613
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0 0	2 1	0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	224	1362	0	0	1269	120	125	0	245	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	224	1362	0	0	1269	120	125	0	245	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	224	1362	0	0	1269	120	125	0	245	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	224	1362	0	0	1269	120	125	0	245	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	224	1362	0	0	1269	120	125	0	245	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	2.74	0.26	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	4800	0	0	4385	415	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.28	0.00	0.00	0.29	0.29	0.08	0.00	0.15	0.00	0.00	0.00
Crit Moves:	****				****				****			

Existing with Project with Mitigation Conditions 2018 Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Avalon Blvd & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.649
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	1 0	2 1	0	1 0	1 1	1	1 0	1 1	1
Volume Module:												
Base Vol:	181	724	153	339	663	376	181	127	311	86	20	235
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	181	724	153	339	663	376	181	127	311	86	20	235
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	181	724	153	339	663	376	181	127	311	86	20	235
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	181	724	153	339	663	376	181	127	311	86	20	235
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	181	724	153	339	663	376	181	127	311	86	20	235
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	1.00	2.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00
Final Sat.:	3200	4800	1600	1600	3200	1600	1600	1600	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.06	0.15	0.10	0.21	0.21	0.24	0.11	0.08	0.10	0.05	0.01	0.07
Crit Moves:		****		****			****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.698
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	114	377	123	152	428	277	32	302	76	127	419	226
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	114	377	123	152	428	277	32	302	76	127	419	226
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	114	377	123	152	428	277	32	302	76	127	419	226
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	114	377	123	152	428	277	32	302	76	127	419	226
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	114	377	123	152	428	277	32	302	76	127	419	226
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.51	0.49	1.00	1.21	0.79	1.00	2.00	1.00	1.00	1.30	0.70
Final Sat.:	1600	2413	787	1600	1943	1257	1600	3200	1600	1600	2079	1121
Capacity Analysis Module:												
Vol/Sat:	0.07	0.16	0.16	0.10	0.22	0.22	0.02	0.09	0.05	0.08	0.20	0.20
Crit Moves:		****				****	****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Main St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.532
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1	1 0	1 1	0
Volume Module:												
Base Vol:	62	416	117	62	386	95	68	408	48	184	529	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	62	416	117	62	386	95	68	408	48	184	529	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	62	416	117	62	386	95	68	408	48	184	529	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	62	416	117	62	386	95	68	408	48	184	529	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	62	416	117	62	386	95	68	408	48	184	529	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.60	0.40	1.00	2.00	1.00	1.00	1.63	0.37
Final Sat.:	1600	3200	1600	1600	2568	632	1600	3200	1600	1600	2608	592
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.07	0.04	0.15	0.15	0.04	0.13	0.03	0.12	0.20	0.20
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #25 Hamilton Ave & I-110 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.596
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:		Ovl			Include			Include			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 1	0 1	1	1 0	0 0	0	0 0	0 0	1	0 1!	0 0
Volume Module:												
Base Vol:	0	79	110	337	95	0	0	0	0	764	0	234
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	79	110	337	95	0	0	0	0	764	0	234
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	79	110	337	95	0	0	0	0	764	0	234
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	79	110	337	95	0	0	0	0	764	0	234
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	79	110	337	95	0	0	0	0	764	0	234
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	1.56	0.44	0.00	0.00	0.00	0.00	1.53	0.00	0.47
Final Sat.:	0	1600	1600	2496	704	0	0	0	0	2450	0	750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.05	0.07	0.13	0.14	0.00	0.00	0.00	0.00	0.31	0.00	0.31
OvlAdjV/S:			0.00									
Crit Moves:		****			****					****		

Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	8.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.518

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	79	110	337	95	764	234
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	79	110	337	95	764	234
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	28	84	24	191	59
Total Analysis Volume [veh/h]	79	110	337	95	764	234
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Permissive	Permissive
Signal group	4	0	0	8	6	0
Auxiliary Signal Groups						
Lead / Lag	-	-	-	-	Lead	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	28	0	0	28	62	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	C
C, Cycle Length [s]	29	29	29	29	29	29
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	9	9	9	9	12	12
g / C, Green / Cycle	0.32	0.32	0.32	0.32	0.41	0.41
(v / s)_i Volume / Saturation Flow Rate	0.04	0.07	0.12	0.22	0.28	0.30
s, saturation flow rate [veh/h]	1870	1589	1320	1207	1781	1686
c, Capacity [veh/h]	596	507	529	588	724	686
d1, Uniform Delay [s]	7.06	7.27	10.28	9.25	7.12	7.29
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.10	0.21	0.33	0.55	1.18	1.50
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.13	0.22	0.31	0.46	0.69	0.73
d, Delay for Lane Group [s/veh]	7.16	7.48	10.61	9.80	8.30	8.78
Lane Group LOS	A	A	B	A	A	A
Critical Lane Group	No	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh]	0.24	0.34	0.70	1.11	1.57	1.65
50th-Percentile Queue Length [ft]	5.88	8.58	17.59	27.79	39.18	41.13
95th-Percentile Queue Length [veh]	0.42	0.62	1.27	2.00	2.82	2.96
95th-Percentile Queue Length [ft]	10.58	15.44	31.66	50.03	70.53	74.04

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	7.16	7.48	10.22	9.80	8.47	8.78
Movement LOS	A	A	B	A	A	A
d_A, Approach Delay [s/veh]	7.35		10.11		8.54	
Approach LOS	A		B		A	
d_I, Intersection Delay [s/veh]	8.82					
Intersection LOS	A					
Intersection V/C	0.518					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000
Crosswalk LOS	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
l_b,int, Bicycle LOS Score for Intersection	4.444	4.845	5.779
Bicycle LOS	E	E	F

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Existing with Project with Mitigation Conditions 2018 Afternoon Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Avalon Blvd & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.824
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	72	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	1 0	2 1	0	1 0	1 1	1	1 0	1 1	1
Volume Module:												
Base Vol:	243	922	154	261	909	263	287	787	586	132	21	189
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	243	922	154	261	909	263	287	787	586	132	21	189
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	243	922	154	261	909	263	287	787	586	132	21	189
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	243	922	154	261	909	263	287	787	586	132	21	189
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	243	922	154	261	909	263	287	787	586	132	21	189
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	1.00	2.33	0.67	1.00	1.72	1.28	1.00	1.00	2.00
Final Sat.:	3200	4800	1600	1600	3723	1077	1600	2751	2049	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.08	0.19	0.10	0.16	0.24	0.24	0.18	0.29	0.29	0.08	0.01	0.06
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.803
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	109	418	139	220	613	170	58	648	150	130	247	226
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	109	418	139	220	613	170	58	648	150	130	247	226
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	109	418	139	220	613	170	58	648	150	130	247	226
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	109	418	139	220	613	170	58	648	150	130	247	226
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	109	418	139	220	613	170	58	648	150	130	247	226
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.50	0.50	1.00	1.57	0.43	1.00	2.00	1.00	1.00	1.04	0.96
Final Sat.:	1600	2401	799	1600	2505	695	1600	3200	1600	1600	1671	1529
Capacity Analysis Module:												
Vol/Sat:	0.07	0.17	0.17	0.14	0.24	0.24	0.04	0.20	0.09	0.08	0.15	0.15
Crit Moves:			****		****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Main St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.747
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1	1 0	1 1	0
Volume Module:												
Base Vol:	67	358	161	163	618	86	81	979	96	127	611	136
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	67	358	161	163	618	86	81	979	96	127	611	136
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	67	358	161	163	618	86	81	979	96	127	611	136
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	67	358	161	163	618	86	81	979	96	127	611	136
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	67	358	161	163	618	86	81	979	96	127	611	136
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.76	0.24	1.00	2.00	1.00	1.00	1.64	0.36
Final Sat.:	1600	3200	1600	1600	2809	391	1600	3200	1600	1600	2617	583
Capacity Analysis Module:												
Vol/Sat:	0.04	0.11	0.10	0.10	0.22	0.22	0.05	0.31	0.06	0.08	0.23	0.23
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #25 Hamilton Ave & I-110 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.689
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	0 1	1 1	0	0 0	0 0	0	0 0	1 0	1!	0 0
Volume Module:												
Base Vol:	0	61	534	648	169	0	0	0	0	296	0	102
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	0	61	534	648	169	0	0	0	0	296	0	102
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Volume:	0	61	534	648	169	0	0	0	0	296	0	102
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	61	534	648	169	0	0	0	0	296	0	102
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	0	61	534	648	169	0	0	0	0	296	0	102
OvlAdjVol:			335									
Saturation Flow Module:												
Sat/Lane:	1600 1600	1600		1600 1600	1600		1600 1600	1600		1600 1600	1600	
Adjustment:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Lanes:	0.00 1.00	1.00		1.59 0.41	0.00		0.00 0.00	0.00		1.49 0.00	0.51	
Final Sat.:	0 1600	1600		2538	662	0	0	0	0	2380	0	820
Capacity Analysis Module:												
Vol/Sat:	0.00 0.04	0.33		0.26 0.26	0.00		0.00 0.00	0.00		0.12 0.00	0.12	
OvlAdjV/S:			0.21									
Crit Moves:			****		****						****	

Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	7.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.472

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	61	534	648	169	296	102
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	61	534	648	169	296	102
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	134	162	42	74	26
Total Analysis Volume [veh/h]	61	534	648	169	296	102
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Permissive	Permissive
Signal group	4	0	0	8	6	0
Auxiliary Signal Groups						
Lead / Lag	-	-	-	-	Lead	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	74	0	0	74	16	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	C
C, Cycle Length [s]	25	25	25	25	25	25
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	12	12	12	12	5	5
g / C, Green / Cycle	0.48	0.48	0.48	0.48	0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.03	0.34	0.26	0.36	0.12	0.12
s, saturation flow rate [veh/h]	1870	1589	1341	1325	1781	1674
c, Capacity [veh/h]	894	760	786	868	365	343
d1, Uniform Delay [s]	3.55	5.17	6.67	5.87	9.02	9.02
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.03	1.20	0.39	0.53	1.36	1.45
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.07	0.70	0.44	0.54	0.56	0.56
d, Delay for Lane Group [s/veh]	3.58	6.37	7.05	6.41	10.38	10.47
Lane Group LOS	A	A	A	A	B	B
Critical Lane Group	No	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh]	0.06	0.88	0.79	0.62	0.77	0.73
50th-Percentile Queue Length [ft]	1.43	22.03	19.70	15.55	19.13	18.23
95th-Percentile Queue Length [veh]	0.10	1.59	1.42	1.12	1.38	1.31
95th-Percentile Queue Length [ft]	2.57	39.66	35.45	27.99	34.43	32.82

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	3.58	6.37	6.76	6.41	10.40	10.47
Movement LOS	A	A	A	A	B	B
d_A, Approach Delay [s/veh]	6.09		6.68		10.42	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	7.31					
Intersection LOS	A					
Intersection V/C	0.472					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000
Crosswalk LOS	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
l_b,int, Bicycle LOS Score for Intersection	5.114	5.480	4.789
Bicycle LOS	F	F	E

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Existing with Project with Mitigation Conditions 2018 Saturday Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.449
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	50	201	111	159	255	73	36	312	50	82	183	149
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	201	111	159	255	73	36	312	50	82	183	149
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	201	111	159	255	73	36	312	50	82	183	149
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	201	111	159	255	73	36	312	50	82	183	149
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	201	111	159	255	73	36	312	50	82	183	149
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.29	0.71	1.00	1.55	0.45	1.00	2.00	1.00	1.00	1.10	0.90
Final Sat.:	1600	2062	1138	1600	2488	712	1600	3200	1600	1600	1764	1436
Capacity Analysis Module:												
Vol/Sat:	0.03	0.10	0.10	0.10	0.10	0.10	0.02	0.10	0.03	0.05	0.10	0.10
Crit Moves:		****				****		****		****		

Future with Project with Mitigation Conditions (County of Los Angeles) 2020 Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Main St & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.511
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	1	0 1	1	0 2	0 0	0	0 1!	0 0	1	0 1!	0 1
Volume Module:												
Base Vol:	4	473	189	268	550	0	1	0	3	197	0	258
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	473	189	268	550	0	1	0	3	197	0	258
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	473	189	268	550	0	1	0	3	197	0	258
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	473	189	268	550	0	1	0	3	197	0	258
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	4	473	189	268	550	0	1	0	3	197	0	258
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.02	1.98	1.00	1.00	2.00	0.00	0.25	0.00	0.75	1.30	xxxx	1.70
Final Sat.:	27	3173	1600	1600	3200	0	400	0	1200	2078	0	2722
Capacity Analysis Module:												
Vol/Sat:	0.00	0.15	0.12	0.17	0.17	0.00	0.00	0.00	0.00	0.09	0.00	0.09
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Main St & I-405 SB On-Ramp

Cycle (sec):	100	Critical Vol./Cap.(X):	0.462
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	0 1	0 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	645	68	163	773	0	29	71	21	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	645	68	163	773	0	29	71	21	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	645	68	163	773	0	29	71	21	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	645	68	163	773	0	29	71	21	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	645	68	163	773	0	29	71	21	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.81	0.19	1.00	2.00	0.00	0.48	1.17	0.35	0.00	0.00	0.00
Final Sat.:	0	2895	305	1600	3200	0	767	1878	555	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.22	0.10	0.24	0.00	0.04	0.04	0.04	0.00	0.00	0.00
Crit Moves:		****		****					****			

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Main St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.672
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	2 1	0	2 0	2 1	0
Volume Module:												
Base Vol:	73	585	357	65	533	150	128	749	34	265	1049	68
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	73	585	357	65	533	150	128	749	34	265	1049	68
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	73	585	357	65	533	150	128	749	34	265	1049	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	73	585	357	65	533	150	128	749	34	265	1049	68
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	73	585	357	65	533	150	128	749	34	265	1049	68
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.56	0.44	1.00	2.87	0.13	2.00	2.82	0.18
Final Sat.:	1600	3200	1600	1600	2497	703	1600	4592	208	2880	4508	292
Capacity Analysis Module:												
Vol/Sat:	0.05	0.18	0.22	0.04	0.21	0.21	0.08	0.16	0.16	0.09	0.23	0.23
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Avalon Blvd & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.661
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	1 0	2 1	0	1 0	1 1	1	1 0	1 1	1
Volume Module:												
Base Vol:	181	780	188	339	772	376	181	129	311	101	20	235
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	181	780	188	339	772	376	181	129	311	101	20	235
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	181	780	188	339	772	376	181	129	311	101	20	235
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	181	780	188	339	772	376	181	129	311	101	20	235
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	181	780	188	339	772	376	181	129	311	101	20	235
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	1.00	2.02	0.98	1.00	1.00	2.00	1.00	1.00	2.00
Final Sat.:	2880	4800	1600	1600	3228	1572	1600	1600	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.06	0.16	0.12	0.21	0.24	0.24	0.11	0.08	0.10	0.06	0.01	0.07
Crit Moves:		****		****			****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Avalon Blvd & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.591
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	136	787	216	379	822	78	85	505	81	118	421	221
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	136	787	216	379	822	78	85	505	81	118	421	221
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	136	787	216	379	822	78	85	505	81	118	421	221
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	136	787	216	379	822	78	85	505	81	118	421	221
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	136	787	216	379	822	78	85	505	81	118	421	221
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.74	0.26	1.00	2.59	0.41	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	4384	416	1600	4137	663	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.16	0.14	0.13	0.19	0.19	0.05	0.12	0.12	0.07	0.13	0.14
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Avalon Blvd & University Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.672
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	2 0	0 0	1
Volume Module:												
Base Vol:	0	947	484	289	752	0	0	0	0	253	0	271
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	947	484	289	752	0	0	0	0	253	0	271
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	947	484	289	752	0	0	0	0	253	0	271
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	947	484	289	752	0	0	0	0	253	0	271
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	947	484	289	752	0	0	0	0	253	0	271
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.30	0.10	0.16	0.00	0.00	0.00	0.00	0.08	0.00	0.17
Crit Moves:			****	****								****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Avalon Blvd & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.880
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	91	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	3 0	1	1 0	2 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	160	1003	134	208	725	320	361	549	97	184	873	127
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	1003	134	208	725	320	361	549	97	184	873	127
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	160	1003	134	208	725	320	361	549	97	184	873	127
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	1003	134	208	725	320	361	549	97	184	873	127
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	160	1003	134	208	725	320	361	549	97	184	873	127
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	2.55	0.45	1.00	2.00	1.00
Final Sat.:	2880	4800	1600	2880	4800	1600	1600	4079	721	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.21	0.08	0.07	0.15	0.20	0.23	0.13	0.13	0.12	0.27	0.08
Crit Moves:		****		****			****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avalon Blvd & I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.663
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	2	0 1	2 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	26	1105	139	0	610	355	503	32	588	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	26	1105	139	0	610	355	503	32	588	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	26	1105	139	0	610	355	503	32	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	1105	139	0	610	355	503	32	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	26	1105	139	0	610	355	503	32	0	0	0	0
OvlAdjVol:						76						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.78	0.22	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2842	358	0	3200	1600	2880	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.39	0.39	0.00	0.19	0.22	0.17	0.01	0.00	0.00	0.00	0.00
OvlAdjV/S:						0.05						
Crit Moves:		****			****			****				

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.730
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	114	418	138	163	471	277	32	302	76	156	419	228
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	114	418	138	163	471	277	32	302	76	156	419	228
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	114	418	138	163	471	277	32	302	76	156	419	228
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	114	418	138	163	471	277	32	302	76	156	419	228
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	114	418	138	163	471	277	32	302	76	156	419	228
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.50	0.50	1.00	1.26	0.74	1.00	2.00	1.00	1.00	1.30	0.70
Final Sat.:	1600	2406	794	1600	2015	1185	1600	3200	1600	1600	2072	1128
Capacity Analysis Module:												
Vol/Sat:	0.07	0.17	0.17	0.10	0.23	0.23	0.02	0.09	0.05	0.10	0.20	0.20
Crit Moves:			****			****			****			****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Main St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.598
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1	1 0	1 1	0
Volume Module:												
Base Vol:	129	471	117	62	458	95	68	416	141	184	534	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	129	471	117	62	458	95	68	416	141	184	534	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	129	471	117	62	458	95	68	416	141	184	534	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	129	471	117	62	458	95	68	416	141	184	534	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	129	471	117	62	458	95	68	416	141	184	534	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.66	0.34	1.00	2.00	1.00	1.00	1.63	0.37
Final Sat.:	1600	3200	1600	1600	2650	550	1600	3200	1600	1600	2613	587
Capacity Analysis Module:												
Vol/Sat:	0.08	0.15	0.07	0.04	0.17	0.17	0.04	0.13	0.09	0.12	0.20	0.20
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 I-110 SB Off-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.722
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	0 0	3 0	0	0 0	3 0	0
Volume Module:												
Base Vol:	0	0	0	281	0	740	0	765	0	0	619	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	281	0	740	0	765	0	0	619	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	281	0	740	0	765	0	0	619	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	281	0	740	0	765	0	0	619	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	281	0	740	0	765	0	0	619	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	3.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	4800	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.18	0.00	0.46	0.00	0.16	0.00	0.00	0.13	0.00
Crit Moves:						****		****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 Hamilton Ave & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.590
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Prot+Permit		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	1	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	58	130	157	50	63	14	37	293	80	418	737	352
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	58	130	157	50	63	14	37	293	80	418	737	352
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	58	130	157	50	63	14	37	293	80	418	737	352
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	58	130	157	50	63	14	37	293	80	418	737	352
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	58	130	157	50	63	14	37	293	80	418	737	352
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.64	0.36	1.00	1.57	0.43	1.00	1.35	0.65
Final Sat.:	1600	1600	1600	1600	2618	582	1600	2514	686	1600	2166	1034
Capacity Analysis Module:												
Vol/Sat:	0.04	0.08	0.10	0.03	0.02	0.02	0.02	0.12	0.12	0.26	0.34	0.34
OvlAdjV/S:			0.00									
Crit Moves:	****			****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #25 Hamilton Ave & I-110 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.638
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	0 1	1 1	0	0 0	0 0	0	0 0	1 0	1!	0 0
Volume Module:												
Base Vol:	0	79	110	372	95	0	0	0	0	773	0	325
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	79	110	372	95	0	0	0	0	773	0	325
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	79	110	372	95	0	0	0	0	773	0	325
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	79	110	372	95	0	0	0	0	773	0	325
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	79	110	372	95	0	0	0	0	773	0	325
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	1.59	0.41	0.00	0.00	0.00	0.00	1.41	0.00	0.59
Final Sat.:	0	1600	1600	2549	651	0	0	0	0	2253	0	947
Capacity Analysis Module:												
Vol/Sat:	0.00	0.05	0.07	0.15	0.15	0.00	0.00	0.00	0.00	0.34	0.00	0.34
OvlAdjV/S:			0.00									
Crit Moves:		****		****						****		

Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	9.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.562

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	79	110	372	95	773	325
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	79	110	372	95	773	325
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	28	93	24	193	81
Total Analysis Volume [veh/h]	79	110	372	95	773	325
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Permissive	Permissive
Signal group	4	0	0	8	6	0
Auxiliary Signal Groups						
Lead / Lag	-	-	-	-	Lead	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	28	0	0	28	62	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	C
C, Cycle Length [s]	33	33	33	33	33	33
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	11	11	11	11	14	14
g / C, Green / Cycle	0.32	0.32	0.32	0.32	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.04	0.07	0.14	0.23	0.31	0.33
s, saturation flow rate [veh/h]	1870	1589	1320	1217	1781	1662
c, Capacity [veh/h]	608	517	524	578	768	717
d1, Uniform Delay [s]	7.81	8.04	11.30	10.44	7.67	7.93
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.10	0.20	0.40	0.64	1.25	1.74
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.13	0.21	0.35	0.49	0.71	0.77
d, Delay for Lane Group [s/veh]	7.91	8.24	11.70	11.09	8.93	9.67
Lane Group LOS	A	A	B	B	A	A
Critical Lane Group	No	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh]	0.29	0.42	0.95	1.43	2.08	2.22
50th-Percentile Queue Length [ft]	7.19	10.45	23.76	35.71	52.12	55.59
95th-Percentile Queue Length [veh]	0.52	0.75	1.71	2.57	3.75	4.00
95th-Percentile Queue Length [ft]	12.94	18.81	42.76	64.28	93.82	100.06

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	7.91	8.24	11.41	11.09	9.14	9.67
Movement LOS	A	A	B	B	A	A
d_A, Approach Delay [s/veh]	8.10		11.33		9.30	
Approach LOS	A		B		A	
d_I, Intersection Delay [s/veh]	9.71					
Intersection LOS	A					
Intersection V/C	0.562					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000
Crosswalk LOS	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
l_b,int, Bicycle LOS Score for Intersection	4.444	4.903	5.944
Bicycle LOS	E	E	F

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 Figueroa St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.747
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:		Ovl			Ovl			Include			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	193	641	378	50	347	349	56	381	77	172	891	97
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	193	641	378	50	347	349	56	381	77	172	891	97
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	193	641	378	50	347	349	56	381	77	172	891	97
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	193	641	378	50	347	349	56	381	77	172	891	97
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	193	641	378	50	347	349	56	381	77	172	891	97
OvlAdjVol:			282			293						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.50	0.50	2.00	1.80	0.20
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	3993	807	2880	2886	314
Capacity Analysis Module:												
Vol/Sat:	0.12	0.20	0.24	0.03	0.11	0.22	0.04	0.10	0.10	0.06	0.31	0.31
OvlAdjV/S:			0.18			0.18						
Crit Moves:	****					****	****				****	

Future with Project with Mitigation Conditions (County of Los Angeles) 2020 Afternoon Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Main St & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.712
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	1 0	1	1 0	2 0	0	0 0	0 0	0 1	1 0	1! 0	1
Volume Module:												
Base Vol:	2	538	318	487	686	0	0	0	3	181	0	340
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	538	318	487	686	0	0	0	3	181	0	340
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	538	318	487	686	0	0	0	3	181	0	340
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	538	318	487	686	0	0	0	3	181	0	340
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	538	318	487	686	0	0	0	3	181	0	340
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	1.99	1.00	1.00	2.00	0.00	0.00	0.00	1.00	1.04	xxxx	1.96
Final Sat.:	12	3188	1600	1600	3200	0	0	0	1600	1668	0	3132
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.20	0.30	0.21	0.00	0.00	0.00	0.00	0.11	0.00	0.11
Crit Moves:			****	****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Main St & I-405 SB On-Ramp

Cycle (sec):	100	Critical Vol./Cap.(X):	0.681
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	0 1	0 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	700	149	315	1135	0	61	276	42	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	700	149	315	1135	0	61	276	42	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	700	149	315	1135	0	61	276	42	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	700	149	315	1135	0	61	276	42	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	700	149	315	1135	0	61	276	42	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.65	0.35	1.00	2.00	0.00	0.32	1.46	0.22	0.00	0.00	0.00
Final Sat.:	0	2638	562	1600	3200	0	515	2330	355	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.27	0.27	0.20	0.35	0.00	0.12	0.12	0.12	0.00	0.00	0.00
Crit Moves:		****		****					****			

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Main St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.893
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	97	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	2 1	0	2 0	2 1	0
Volume Module:												
Base Vol:	35	491	414	153	867	186	230	1407	102	358	1003	116
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	35	491	414	153	867	186	230	1407	102	358	1003	116
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	35	491	414	153	867	186	230	1407	102	358	1003	116
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	491	414	153	867	186	230	1407	102	358	1003	116
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	35	491	414	153	867	186	230	1407	102	358	1003	116
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.65	0.35	1.00	2.80	0.20	2.00	2.69	0.31
Final Sat.:	1600	3200	1600	1600	2635	565	1600	4476	324	2880	4302	498
Capacity Analysis Module:												
Vol/Sat:	0.02	0.15	0.26	0.10	0.33	0.33	0.14	0.31	0.31	0.12	0.23	0.23
Crit Moves:			****	****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Avalon Blvd & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.854
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	81	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	1 0	2 1	0	1 0	1 1	1	1 0	1 1	1
Volume Module:												
Base Vol:	243	1003	210	261	1063	263	287	797	586	150	21	189
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	243	1003	210	261	1063	263	287	797	586	150	21	189
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	243	1003	210	261	1063	263	287	797	586	150	21	189
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	243	1003	210	261	1063	263	287	797	586	150	21	189
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	243	1003	210	261	1063	263	287	797	586	150	21	189
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	1.00	2.40	0.60	1.00	1.73	1.27	1.00	1.00	2.00
Final Sat.:	2880	4800	1600	1600	3848	952	1600	2766	2034	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.08	0.21	0.13	0.16	0.28	0.28	0.18	0.29	0.29	0.09	0.01	0.06
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Avalon Blvd & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.772
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	61	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	156	997	255	427	1199	85	114	662	158	218	712	353
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	156	997	255	427	1199	85	114	662	158	218	712	353
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	156	997	255	427	1199	85	114	662	158	218	712	353
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	156	997	255	427	1199	85	114	662	158	218	712	353
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	156	997	255	427	1199	85	114	662	158	218	712	353
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.80	0.20	1.00	2.42	0.58	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	4482	318	1600	3875	925	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.21	0.16	0.15	0.27	0.27	0.07	0.17	0.17	0.14	0.22	0.22
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Avalon Blvd & University Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.620
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	2 0	0 0	1
Volume Module:												
Base Vol:	0	1165	353	351	1300	0	0	0	0	496	0	233
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1165	353	351	1300	0	0	0	0	496	0	233
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1165	353	351	1300	0	0	0	0	496	0	233
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1165	353	351	1300	0	0	0	0	496	0	233
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1165	353	351	1300	0	0	0	0	496	0	233
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.24	0.22	0.12	0.27	0.00	0.00	0.00	0.00	0.16	0.00	0.15
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Avalon Blvd & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.878
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	90	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	3 0	1	1 0	2 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	171	1169	179	330	1122	426	346	998	243	253	652	192
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	171	1169	179	330	1122	426	346	998	243	253	652	192
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	171	1169	179	330	1122	426	346	998	243	253	652	192
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	171	1169	179	330	1122	426	346	998	243	253	652	192
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	171	1169	179	330	1122	426	346	998	243	253	652	192
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	2.41	0.59	1.00	2.00	1.00
Final Sat.:	2880	4800	1600	2880	4800	1600	1600	3860	940	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.24	0.11	0.11	0.23	0.27	0.22	0.26	0.26	0.16	0.20	0.12
Crit Moves:		****		****			****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avalon Blvd & I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.641
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	2	0 1	2 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	53	1161	184	0	1172	533	348	224	454	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	53	1161	184	0	1172	533	348	224	454	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	53	1161	184	0	1172	533	348	224	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	53	1161	184	0	1172	533	348	224	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	53	1161	184	0	1172	533	348	224	0	0	0	0
OvlAdjVol:						340						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.73	0.27	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2762	438	0	3200	1600	2880	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.42	0.42	0.00	0.37	0.33	0.12	0.07	0.00	0.00	0.00	0.00
OvlAdjV/S:						0.21						
Crit Moves:		****			****			****				

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.880
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	91	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	109	496	153	223	678	170	58	648	150	176	247	236
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	109	496	153	223	678	170	58	648	150	176	247	236
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	109	496	153	223	678	170	58	648	150	176	247	236
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	109	496	153	223	678	170	58	648	150	176	247	236
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	109	496	153	223	678	170	58	648	150	176	247	236
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.53	0.47	1.00	1.60	0.40	1.00	2.00	1.00	1.00	1.02	0.98
Final Sat.:	1600	2446	754	1600	2558	642	1600	3200	1600	1600	1636	1564
Capacity Analysis Module:												
Vol/Sat:	0.07	0.20	0.20	0.14	0.26	0.27	0.04	0.20	0.09	0.11	0.15	0.15
Crit Moves:			****			****		****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Main St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.867
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	86	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1	1 0	1 1	0
Volume Module:												
Base Vol:	191	450	161	163	728	86	81	1004	215	127	638	136
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	191	450	161	163	728	86	81	1004	215	127	638	136
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	191	450	161	163	728	86	81	1004	215	127	638	136
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	191	450	161	163	728	86	81	1004	215	127	638	136
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	191	450	161	163	728	86	81	1004	215	127	638	136
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.79	0.21	1.00	2.00	1.00	1.00	1.65	0.35
Final Sat.:	1600	3200	1600	1600	2862	338	1600	3200	1600	1600	2638	562
Capacity Analysis Module:												
Vol/Sat:	0.12	0.14	0.10	0.10	0.25	0.25	0.05	0.31	0.13	0.08	0.24	0.24
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 I-110 SB Off-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.689
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	0 0	3 0	0	0 0	3 0	0
Volume Module:												
Base Vol:	0	0	0	394	0	466	0	1430	0	0	749	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	394	0	466	0	1430	0	0	749	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	394	0	466	0	1430	0	0	749	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	394	0	466	0	1430	0	0	749	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	394	0	466	0	1430	0	0	749	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	3.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	4800	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.25	0.00	0.29	0.00	0.30	0.00	0.00	0.16	0.00
Crit Moves:						****		****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 Hamilton Ave & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.794
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	65	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Prot+Permit		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	1	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	24	34	282	292	315	62	13	641	197	366	502	97
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	24	34	282	292	315	62	13	641	197	366	502	97
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	24	34	282	292	315	62	13	641	197	366	502	97
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	34	282	292	315	62	13	641	197	366	502	97
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	24	34	282	292	315	62	13	641	197	366	502	97
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.67	0.33	1.00	1.53	0.47	1.00	1.68	0.32
Final Sat.:	1600	1600	1600	1600	2674	526	1600	2448	752	1600	2682	518
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.18	0.18	0.12	0.12	0.01	0.26	0.26	0.23	0.19	0.19
OvlAdjV/S:			0.00									
Crit Moves:	****			****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #25 Hamilton Ave & I-110 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.716
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	0 1	1 1	0	0 0	0 0	0	0 0	1 0	1!	0 0
Volume Module:												
Base Vol:	0	61	534	733	169	0	0	0	0	331	0	260
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	61	534	733	169	0	0	0	0	331	0	260
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	61	534	733	169	0	0	0	0	331	0	260
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	61	534	733	169	0	0	0	0	331	0	260
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	61	534	733	169	0	0	0	0	331	0	260
OvlAdjVol:			238									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	1.63	0.37	0.00	0.00	0.00	0.00	1.12	0.00	0.88
Final Sat.:	0	1600	1600	2600	600	0	0	0	0	1792	0	1408
Capacity Analysis Module:												
Vol/Sat:	0.00	0.04	0.33	0.28	0.28	0.00	0.00	0.00	0.00	0.18	0.00	0.18
OvlAdjV/S:			0.15									
Crit Moves:			****		****					****		

Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	9.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.559

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	61	534	733	169	331	260
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	61	534	733	169	331	260
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	134	183	42	83	65
Total Analysis Volume [veh/h]	61	534	733	169	331	260
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Permissive	Permissive
Signal group	4	0	0	8	6	0
Auxiliary Signal Groups						
Lead / Lag	-	-	-	-	Lead	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	57	0	0	57	33	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	C
C, Cycle Length [s]	32	32	32	32	32	32
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	15	15	15	15	8	8
g / C, Green / Cycle	0.48	0.48	0.48	0.48	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.03	0.34	0.30	0.38	0.17	0.18
s, saturation flow rate [veh/h]	1870	1589	1341	1308	1781	1602
c, Capacity [veh/h]	905	769	757	823	468	421
d1, Uniform Delay [s]	4.35	6.33	8.26	7.65	10.40	10.41
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.03	1.14	0.58	0.74	1.62	1.83
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.07	0.69	0.53	0.61	0.66	0.67
d, Delay for Lane Group [s/veh]	4.38	7.47	8.84	8.39	12.02	12.24
Lane Group LOS	A	A	A	A	B	B
Critical Lane Group	No	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh]	0.11	1.58	1.52	1.81	1.57	1.44
50th-Percentile Queue Length [ft]	2.81	39.42	37.94	45.14	39.14	35.97
95th-Percentile Queue Length [veh]	0.20	2.84	2.73	3.25	2.82	2.59
95th-Percentile Queue Length [ft]	5.06	70.96	68.28	81.26	70.45	64.74

Movement, Approach, & Intersection Results

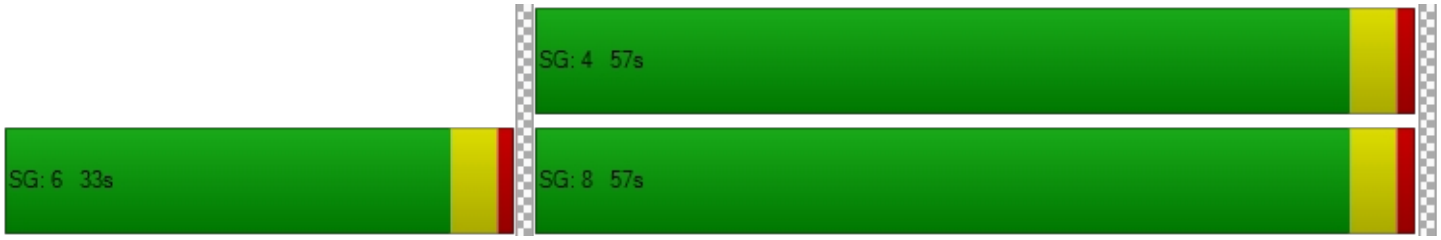
d_M, Delay for Movement [s/veh]	4.38	7.47	8.64	8.39	12.04	12.24
Movement LOS	A	A	A	A	B	B
d_A, Approach Delay [s/veh]	7.15		8.59		12.12	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	9.18					
Intersection LOS	A					
Intersection V/C	0.559					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000
Crosswalk LOS	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
l_b,int, Bicycle LOS Score for Intersection	5.114	5.621	5.108
Bicycle LOS	F	F	F

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 Figueroa St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.715
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:		Ovl			Ovl			Include			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	63	407	410	185	693	206	68	1033	132	348	693	87
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	63	407	410	185	693	206	68	1033	132	348	693	87
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	63	407	410	185	693	206	68	1033	132	348	693	87
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	63	407	410	185	693	206	68	1033	132	348	693	87
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	63	407	410	185	693	206	68	1033	132	348	693	87
OvlAdjVol:			217			138						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.66	0.34	2.00	1.78	0.22
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	4256	544	2880	2843	357
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.26	0.12	0.22	0.13	0.04	0.24	0.24	0.12	0.24	0.24
OvlAdjV/S:			0.14			0.09						
Crit Moves:			****	****				****		****		

Future with Project with Mitigation Conditions (County of Los Angeles) 2020 Saturday Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Main St & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.665
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	0 1	1 0	2	0 0	0 0	1!	0 0	1 0	1!	0 1
Volume Module:												
Base Vol:	0	301	239	448	312	0	0	0	0	197	0	434
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	301	239	448	312	0	0	0	0	197	0	434
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	301	239	448	312	0	0	0	0	197	0	434
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	301	239	448	312	0	0	0	0	197	0	434
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	301	239	448	312	0	0	0	0	197	0	434
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00
Final Sat.:	0	3200	1600	1600	3200	0	0	1600	0	1600	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.09	0.15	0.28	0.10	0.00	0.00	0.00	0.00	0.12	0.00	0.14
Crit Moves:			****	****								****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Main St & I-405 SB On-Ramp

Cycle (sec):	100	Critical Vol./Cap.(X):	0.452
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	0 1	0 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	435	247	166	698	0	19	77	15	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	435	247	166	698	0	19	77	15	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	435	247	166	698	0	19	77	15	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	435	247	166	698	0	19	77	15	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	435	247	166	698	0	19	77	15	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.28	0.72	1.00	2.00	0.00	0.34	1.39	0.27	0.00	0.00	0.00
Final Sat.:	0	2041	1159	1600	3200	0	548	2220	432	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.21	0.10	0.22	0.00	0.03	0.03	0.03	0.00	0.00	0.00
Crit Moves:		****		****					****			

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Avalon Blvd & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.919
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	110	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	3 0	1	1 0	2 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	327	1109	160	304	1004	426	472	498	269	239	461	194
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	327	1109	160	304	1004	426	472	498	269	239	461	194
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	327	1109	160	304	1004	426	472	498	269	239	461	194
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	327	1109	160	304	1004	426	472	498	269	239	461	194
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	327	1109	160	304	1004	426	472	498	269	239	461	194
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	2880	4800	1600	2880	4800	1600	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.23	0.10	0.11	0.21	0.27	0.30	0.16	0.17	0.15	0.14	0.12
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avalon Blvd & I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.912
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	106	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	2	0 1	2 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	278	1186	177	0	1032	838	909	273	679	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	278	1186	177	0	1032	838	909	273	679	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	278	1186	177	0	1032	838	909	273	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	278	1186	177	0	1032	838	909	273	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	278	1186	177	0	1032	838	909	273	0	0	0	0
OvlAdjVol:						333						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.74	0.26	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2784	416	0	3200	1600	2880	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.17	0.43	0.43	0.00	0.32	0.52	0.32	0.09	0.00	0.00	0.00	0.00
OvlAdjV/S:						0.21						
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.580
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	50	364	130	161	399	73	36	312	50	129	183	151
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	364	130	161	399	73	36	312	50	129	183	151
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	364	130	161	399	73	36	312	50	129	183	151
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	364	130	161	399	73	36	312	50	129	183	151
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	364	130	161	399	73	36	312	50	129	183	151
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.47	0.53	1.00	1.69	0.31	1.00	2.00	1.00	1.00	1.10	0.90
Final Sat.:	1600	2358	842	1600	2705	495	1600	3200	1600	1600	1753	1447
Capacity Analysis Module:												
Vol/Sat:	0.03	0.15	0.15	0.10	0.15	0.15	0.02	0.10	0.03	0.08	0.10	0.10
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 I-110 SB Off-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.534
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	0 0	3 0	0	0 0	3 0	0
Volume Module:												
Base Vol:	0	0	0	354	0	360	0	1019	0	0	580	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	354	0	360	0	1019	0	0	580	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	354	0	360	0	1019	0	0	580	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	354	0	360	0	1019	0	0	580	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	354	0	360	0	1019	0	0	580	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	3.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	4800	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.22	0.00	0.23	0.00	0.21	0.00	0.00	0.12	0.00
Crit Moves:				****				****		****		

Future Base Conditions
(City of Carson) 2020
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Main St & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.581
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0 1	0	1	0 2	0 0	0	0 1!	0 0	1	0 1!	0 0
Volume Module:												
Base Vol:	4	478	160	224	555	0	1	0	3	176	0	224
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	478	160	224	555	0	1	0	3	176	0	224
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	478	160	224	555	0	1	0	3	176	0	224
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	478	160	224	555	0	1	0	3	176	0	224
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	4	478	160	224	555	0	1	0	3	176	0	224
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	1.49	0.50	1.00	2.00	0.00	0.25	0.00	0.75	1.00	0.00	1.00
Final Sat.:	20	2383	798	1600	3200	0	400	0	1200	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.20	0.14	0.17	0.00	0.00	0.00	0.00	0.11	0.00	0.14
Crit Moves:		****		****			****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Main St & 1-405 NB off

Cycle (sec):	100	Critical Vol./Cap.(X):	0.590
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	0 1	0 1	0
Volume Module:												
Base Vol:	28	688	0	0	756	71	0	0	0	107	327	252
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	28	688	0	0	756	71	0	0	0	107	327	252
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	28	688	0	0	756	71	0	0	0	107	327	252
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	28	688	0	0	756	71	0	0	0	107	327	252
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	28	688	0	0	756	71	0	0	0	107	327	252
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.83	0.17	0.00	0.00	0.00	0.31	0.96	0.73
Final Sat.:	1600	3200	0	0	2925	275	0	0	0	499	1525	1176
Capacity Analysis Module:												
Vol/Sat:	0.02	0.22	0.00	0.00	0.26	0.26	0.00	0.00	0.00	0.07	0.21	0.21
Crit Moves:	****				****						****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Main St & I-405 SB On-Ramp

Cycle (sec):	100	Critical Vol./Cap.(X):	0.475
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	1 0	0 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	629	69	158	763	0	29	72	21	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	629	69	158	763	0	29	72	21	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	629	69	158	763	0	29	72	21	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	629	69	158	763	0	29	72	21	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	629	69	158	763	0	29	72	21	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.80	0.20	1.00	2.00	0.00	1.00	0.77	0.23	0.00	0.00	0.00
Final Sat.:	0	2884	316	1600	3200	0	1600	1239	361	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.22	0.10	0.24	0.00	0.02	0.06	0.06	0.00	0.00	0.00
Crit Moves:		****		****				****				

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Main St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.765
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	74	578	360	65	529	143	118	755	34	267	1058	68
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	74	578	360	65	529	143	118	755	34	267	1058	68
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	74	578	360	65	529	143	118	755	34	267	1058	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	74	578	360	65	529	143	118	755	34	267	1058	68
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	74	578	360	65	529	143	118	755	34	267	1058	68
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.23	0.77	1.00	1.57	0.43	1.00	2.87	0.13	1.00	2.82	0.18
Final Sat.:	1600	1972	1228	1600	2519	681	1600	4593	207	1600	4510	290
Capacity Analysis Module:												
Vol/Sat:	0.05	0.29	0.29	0.04	0.21	0.21	0.07	0.16	0.16	0.17	0.23	0.23
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Main St & Torrance Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.658
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	1 0	2 0	1	0 1	0	0 1	0 0	1! 0	0
Volume Module:												
Base Vol:	317	651	7	13	560	258	318	18	184	13	55	32
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	317	651	7	13	560	258	318	18	184	13	55	32
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	317	651	7	13	560	258	318	18	184	13	55	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	317	651	7	13	560	258	318	18	184	13	55	32
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	317	651	7	13	560	258	318	18	184	13	55	32
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.98	0.02	1.00	2.00	1.00	0.95	0.05	1.00	0.13	0.55	0.32
Final Sat.:	2880	3166	34	1600	3200	1600	1514	86	1600	208	880	512
Capacity Analysis Module:												
Vol/Sat:	0.11	0.21	0.21	0.01	0.17	0.16	0.21	0.21	0.12	0.06	0.06	0.06
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Avalon Blvd & Artesia Blvd/SR 90

Cycle (sec):	100	Critical Vol./Cap.(X):	0.572
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	971	168	179	1156	0	0	0	0	389	0	606
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	971	168	179	1156	0	0	0	0	389	0	606
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	971	168	179	1156	0	0	0	0	389	0	606
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	971	168	179	1156	0	0	0	0	389	0	606
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	971	168	179	1156	0	0	0	0	389	0	606
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.17	0.01	1.82
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	1877	0	2923
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.11	0.06	0.24	0.00	0.00	0.00	0.00	0.21	0.00	0.21
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Avalon Blvd & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.664
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	1 0	1 1	1	1 0	1 1	1
Volume Module:												
Base Vol:	183	778	187	342	772	380	183	130	314	96	20	237
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	183	778	187	342	772	380	183	130	314	96	20	237
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	183	778	187	342	772	380	183	130	314	96	20	237
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	183	778	187	342	772	380	183	130	314	96	20	237
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	183	778	187	342	772	380	183	130	314	96	20	237
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.01	0.99	1.00	1.00	2.00	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3217	1583	1600	1600	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.11	0.16	0.12	0.21	0.24	0.24	0.11	0.08	0.10	0.06	0.01	0.07
Crit Moves:		****		****			****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Avalon Blvd & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.627
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	137	783	215	383	815	79	86	510	82	115	425	223
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	137	783	215	383	815	79	86	510	82	115	425	223
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	137	783	215	383	815	79	86	510	82	115	425	223
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	137	783	215	383	815	79	86	510	82	115	425	223
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	137	783	215	383	815	79	86	510	82	115	425	223
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.73	0.27	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	4376	424	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.16	0.13	0.13	0.19	0.19	0.05	0.16	0.05	0.07	0.13	0.14
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Avalon Blvd & 184th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.416
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	0 0	1! 0	0	1 0	1! 0	1
Volume Module:												
Base Vol:	19	1080	63	37	978	8	58	0	45	8	0	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	19	1080	63	37	978	8	58	0	45	8	0	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	19	1080	63	37	978	8	58	0	45	8	0	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	1080	63	37	978	8	58	0	45	8	0	11
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	19	1080	63	37	978	8	58	0	45	8	0	11
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.98	0.02	0.56	0.00	0.44	1.26	0.00	1.74
Final Sat.:	1600	4800	1600	1600	4761	39	901	0	699	2021	0	2779
Capacity Analysis Module:												
Vol/Sat:	0.01	0.23	0.04	0.02	0.21	0.21	0.06	0.00	0.06	0.00	0.00	0.00
Crit Moves:		****		****			****			****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Avalon Blvd & University Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.676
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	0 0	1
Volume Module:												
Base Vol:	0	940	486	292	740	0	0	0	0	252	0	274
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	940	486	292	740	0	0	0	0	252	0	274
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	940	486	292	740	0	0	0	0	252	0	274
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	940	486	292	740	0	0	0	0	252	0	274
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	940	486	292	740	0	0	0	0	252	0	274
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.30	0.10	0.15	0.00	0.00	0.00	0.00	0.16	0.00	0.17
Crit Moves:			****	****								****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Avalon Blvd & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.445
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2	1 0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	119	1322	0	0	874	104	111	0	63	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	119	1322	0	0	874	104	111	0	63	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	119	1322	0	0	874	104	111	0	63	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	119	1322	0	0	874	104	111	0	63	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	119	1322	0	0	874	104	111	0	63	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.68	0.32	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4290	510	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.28	0.00	0.00	0.20	0.20	0.07	0.00	0.04	0.00	0.00	0.00
Crit Moves:		****		****			****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Avalon Blvd & Elsmere Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.489
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	0	1388	68	34	910	0	0	0	0	103	0	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1388	68	34	910	0	0	0	0	103	0	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1388	68	34	910	0	0	0	0	103	0	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1388	68	34	910	0	0	0	0	103	0	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1388	68	34	910	0	0	0	0	103	0	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.86	0.14	1.00	3.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	4576	224	1600	4800	0	1600	1600	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.30	0.30	0.02	0.19	0.00	0.00	0.00	0.00	0.06	0.00	0.03
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Avalon Blvd & Turmont St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.634
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	1 0	3 0	1	1 0	1 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	217	1343	115	69	872	97	65	9	137	162	13	103
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	217	1343	115	69	872	97	65	9	137	162	13	103
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	217	1343	115	69	872	97	65	9	137	162	13	103
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	217	1343	115	69	872	97	65	9	137	162	13	103
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	217	1343	115	69	872	97	65	9	137	162	13	103
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.76	0.24	1.00	3.00	1.00	1.00	1.00	1.00	1.00	0.11	0.89
Final Sat.:	2880	4421	379	1600	4800	1600	1600	1600	1600	1600	179	1421
Capacity Analysis Module:												
Vol/Sat:	0.08	0.30	0.30	0.04	0.18	0.06	0.04	0.01	0.09	0.10	0.07	0.07
Crit Moves:		****		****					****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Avalon Blvd & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.922
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	112	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	161	1006	135	207	727	322	364	554	98	186	881	124
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	161	1006	135	207	727	322	364	554	98	186	881	124
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	161	1006	135	207	727	322	364	554	98	186	881	124
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	161	1006	135	207	727	322	364	554	98	186	881	124
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	161	1006	135	207	727	322	364	554	98	186	881	124
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.08	0.92	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	3327	1473	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.21	0.08	0.07	0.22	0.22	0.23	0.17	0.06	0.12	0.28	0.08
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Avalon Blvd & I-405 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.514
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 1	0 0	1
Volume Module:												
Base Vol:	475	1219	0	0	862	289	0	0	0	106	0	506
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	475	1219	0	0	862	289	0	0	0	106	0	506
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	475	1219	0	0	862	0	0	0	0	106	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	475	1219	0	0	862	0	0	0	0	106	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	475	1219	0	0	862	0	0	0	0	106	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	2880	3200	0	0	4800	1600	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.16	0.38	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.03	0.00	0.00
Crit Moves:		****								****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avalon Blvd & I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.668
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	2	0 1	2 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	26	1115	140	0	616	355	505	32	594	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	26	1115	140	0	616	355	505	32	594	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	26	1115	140	0	616	355	505	32	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	1115	140	0	616	355	505	32	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	26	1115	140	0	616	355	505	32	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.78	0.22	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2843	357	0	3200	1600	2880	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.39	0.39	0.00	0.19	0.22	0.18	0.01	0.00	0.00	0.00	0.00
Crit Moves:		****		****			****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 Main St & SR 91 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.654
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	0	565	110	66	528	0	0	0	0	483	0	409
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	565	110	66	528	0	0	0	0	483	0	409
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	565	110	66	528	0	0	0	0	483	0	409
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	565	110	66	528	0	0	0	0	483	0	409
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	565	110	66	528	0	0	0	0	483	0	409
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.67	0.33	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	2679	521	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.21	0.04	0.17	0.00	0.00	0.00	0.00	0.30	0.00	0.26
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.726
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	112	405	137	165	463	280	32	305	74	143	423	230
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	112	405	137	165	463	280	32	305	74	143	423	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	112	405	137	165	463	280	32	305	74	143	423	230
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	112	405	137	165	463	280	32	305	74	143	423	230
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	112	405	137	165	463	280	32	305	74	143	423	230
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.49	0.51	1.00	1.25	0.75	1.00	1.61	0.39	1.00	1.30	0.70
Final Sat.:	1600	2391	809	1600	1994	1206	1600	2575	625	1600	2073	1127
Capacity Analysis Module:												
Vol/Sat:	0.07	0.17	0.17	0.10	0.23	0.23	0.02	0.12	0.12	0.09	0.20	0.20
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Main St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.626
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	118	453	118	63	433	96	69	420	125	186	539	121
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	118	453	118	63	433	96	69	420	125	186	539	121
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	118	453	118	63	433	96	69	420	125	186	539	121
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	118	453	118	63	433	96	69	420	125	186	539	121
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	118	453	118	63	433	96	69	420	125	186	539	121
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.64	0.36	1.00	1.54	0.46	1.00	1.63	0.37
Final Sat.:	1600	3200	1600	1600	2619	581	1600	2466	734	1600	2613	587
Capacity Analysis Module:												
Vol/Sat:	0.07	0.14	0.07	0.04	0.17	0.17	0.04	0.17	0.17	0.12	0.21	0.21
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 Figueroa St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.637
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	153	575	90	49	404	121	153	558	145	61	571	77
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	153	575	90	49	404	121	153	558	145	61	571	77
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	153	575	90	49	404	121	153	558	145	61	571	77
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	153	575	90	49	404	121	153	558	145	61	571	77
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	153	575	90	49	404	121	153	558	145	61	571	77
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.73	0.27	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.76	0.24
Final Sat.:	1600	2767	433	1600	3200	1600	1600	3200	1600	1600	2820	380
Capacity Analysis Module:												
Vol/Sat:	0.10	0.21	0.21	0.03	0.13	0.08	0.10	0.17	0.09	0.04	0.20	0.20
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 I-110 NB On-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.385
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	2	0	1	1	0	1	0	2	0	1
Volume Module:												
Base Vol:	0	0	0	0	0	0	164	913	0	0	592	237
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	164	913	0	0	592	237
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	164	913	0	0	592	237
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	164	913	0	0	592	237
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	164	913	0	0	592	237
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	1600	0	0	0	0	3200	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.29	0.00	0.00	0.19	0.15
Crit Moves:								****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 I-110 SB Off-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.805
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	68	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	0 0	2 0	0	0 0	3 0	0
Volume Module:												
Base Vol:	0	0	0	278	0	747	0	761	0	0	617	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	278	0	747	0	761	0	0	617	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	278	0	747	0	761	0	0	617	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	278	0	747	0	761	0	0	617	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	278	0	747	0	761	0	0	617	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.17	0.00	0.47	0.00	0.24	0.00	0.00	0.13	0.00
Crit Moves:						****		****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 Central Ave & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.815
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	70	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	2 0	2 0	1	2 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	132	537	23	196	744	680	223	217	132	23	297	118
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	132	537	23	196	744	680	223	217	132	23	297	118
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	132	537	23	196	744	680	223	217	132	23	297	118
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	132	537	23	196	744	680	223	217	132	23	297	118
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	132	537	23	196	744	680	223	217	132	23	297	118
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.24	0.76	1.00	1.43	0.57
Final Sat.:	1600	3200	1600	2880	3200	1600	2880	1990	1210	1600	2290	910
Capacity Analysis Module:												
Vol/Sat:	0.08	0.17	0.01	0.07	0.23	0.43	0.08	0.11	0.11	0.01	0.13	0.13
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 Hamilton Ave & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.608
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	59	131	158	51	64	14	37	293	81	416	741	356
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	59	131	158	51	64	14	37	293	81	416	741	356
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	59	131	158	51	64	14	37	293	81	416	741	356
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	59	131	158	51	64	14	37	293	81	416	741	356
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	59	131	158	51	64	14	37	293	81	416	741	356
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.64	0.36	1.00	1.57	0.43	1.00	1.35	0.65
Final Sat.:	1600	1600	1600	1600	2626	574	1600	2507	693	1600	2162	1038
Capacity Analysis Module:												
Vol/Sat:	0.04	0.08	0.10	0.03	0.02	0.02	0.02	0.12	0.12	0.26	0.34	0.34
Crit Moves:			****	****				****		****		

Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	All-way stop	Delay (sec / veh):	59.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.103

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	80	111	369	96	781	327
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	80	111	369	96	781	327
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	28	92	24	195	82
Total Analysis Volume [veh/h]	80	111	369	96	781	327
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	458	502	455	486	554	558
Degree of Utilization, x	0.17	0.22	0.81	0.20	1.10	0.99

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.63	0.84	7.56	0.73	17.99	14.19
95th-Percentile Queue Length [ft]	15.67	20.93	189.01	18.22	449.70	354.72
Approach Delay [s/veh]	12.03		31.53		79.14	
Approach LOS	B		D		F	
Intersection Delay [s/veh]	59.33					
Intersection LOS	F					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 Figueroa St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.756
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	195	647	374	51	350	352	57	381	78	173	891	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	195	647	374	51	350	352	57	381	78	173	891	98
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	195	647	374	51	350	352	57	381	78	173	891	98
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	195	647	374	51	350	352	57	381	78	173	891	98
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	195	647	374	51	350	352	57	381	78	173	891	98
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.66	0.34	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	2656	544	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.12	0.20	0.23	0.03	0.11	0.22	0.04	0.14	0.14	0.11	0.28	0.06
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 Figueroa St & I-110 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.729
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	2 0	1	1 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	692	605	0	0	415	194	605	0	225	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	692	605	0	0	415	194	605	0	225	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	692	605	0	0	415	194	605	0	225	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	692	605	0	0	415	194	605	0	225	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	692	605	0	0	415	194	605	0	225	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	2.00	1.00	1.46	0.00	0.54	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	3200	1600	2333	0	867	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.24	0.19	0.00	0.00	0.13	0.12	0.26	0.00	0.26	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 SR 91 EB Ramps & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.558
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Street Name:	SR 91 EB Ramps						Albertoni St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	2 0	2 0	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	0	281	0	255	282	331	0	0	500	89
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	281	0	255	282	331	0	0	500	89
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	281	0	255	282	331	0	0	500	89
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	281	0	255	282	331	0	0	500	89
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	281	0	255	282	331	0	0	500	89
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.70	0.30
Final Sat.:	0	0	0	1600	0	1600	2880	3200	0	0	2716	484
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.18	0.00	0.16	0.10	0.10	0.00	0.00	0.18	0.18
Crit Moves:				****			****				****	

Intersection Level Of Service Report
Intersection 29: Main Street & Broadway

Control Type:	Two-way stop	Delay (sec / veh):	18.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.686

Intersection Setup

Name	Main Street		Main Street		Broadway	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Main Street		Main Street		Broadway	
Base Volume Input [veh/h]	272	716	712	5	0	186
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	272	716	712	5	0	186
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	68	179	178	1	0	47
Total Analysis Volume [veh/h]	272	716	712	5	0	186
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.69	0.80	0.44	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	18.76	11.67	7.84	0.00	0.00	0.00
Movement LOS	C	B	A	A		A
95th-Percentile Queue Length [veh]	1.50	1.94	0.84	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	37.46	48.51	20.96	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	13.62		7.79		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	10.07					
Intersection LOS	C					

Future Base Conditions
(City of Carson) 2020
Afternoon Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Main St & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.791
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	65	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0 1	0	1	0 2	0 0	0	0 0	0 1	1	0 1!	0 0
Volume Module:												
Base Vol:	2	543	281	418	693	0	0	0	3	141	0	274
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	543	281	418	693	0	0	0	3	141	0	274
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	543	281	418	693	0	0	0	3	141	0	274
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	543	281	418	693	0	0	0	3	141	0	274
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	543	281	418	693	0	0	0	3	141	0	274
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	1.31	0.68	1.00	2.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	8	2104	1089	1600	3200	0	0	0	1600	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.26	0.26	0.22	0.00	0.00	0.00	0.00	0.09	0.00	0.17
Crit Moves:		****		****			****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Main St & 1-405 NB off

Cycle (sec):	100	Critical Vol./Cap.(X):	0.723
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	0 1	0 1	0
Volume Module:												
Base Vol:	21	713	0	0	1320	93	0	0	0	102	122	269
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	713	0	0	1320	93	0	0	0	102	122	269
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	21	713	0	0	1320	93	0	0	0	102	122	269
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	21	713	0	0	1320	93	0	0	0	102	122	269
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	21	713	0	0	1320	93	0	0	0	102	122	269
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.87	0.13	0.00	0.00	0.00	0.41	0.59	1.00
Final Sat.:	1600	3200	0	0	2989	211	0	0	0	662	938	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.22	0.00	0.00	0.44	0.44	0.00	0.00	0.00	0.06	0.13	0.17
Crit Moves:	****				****							****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Main St & I-405 SB On-Ramp

Cycle (sec):	100	Critical Vol./Cap.(X):	0.752
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	1 0	0 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	677	150	308	1115	0	62	279	42	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	677	150	308	1115	0	62	279	42	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	677	150	308	1115	0	62	279	42	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	677	150	308	1115	0	62	279	42	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	677	150	308	1115	0	62	279	42	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.64	0.36	1.00	2.00	0.00	1.00	0.87	0.13	0.00	0.00	0.00
Final Sat.:	0	2620	580	1600	3200	0	1600	1391	209	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.26	0.19	0.35	0.00	0.04	0.20	0.20	0.00	0.00	0.00
Crit Moves:		****		****				****				

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Main St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.016
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	35	481	414	154	859	173	218	1408	103	360	1005	117
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	35	481	414	154	859	173	218	1408	103	360	1005	117
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	35	481	414	154	859	173	218	1408	103	360	1005	117
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	481	414	154	859	173	218	1408	103	360	1005	117
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	35	481	414	154	859	173	218	1408	103	360	1005	117
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.07	0.93	1.00	1.66	0.34	1.00	2.80	0.20	1.00	2.69	0.31
Final Sat.:	1600	1720	1480	1600	2664	536	1600	4473	327	1600	4299	501
Capacity Analysis Module:												
Vol/Sat:	0.02	0.28	0.28	0.10	0.32	0.32	0.14	0.31	0.31	0.23	0.23	0.23
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Main St & Torrance Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.781
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	1 0	2 0	1	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	191	470	11	38	881	361	435	58	488	6	17	27
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	191	470	11	38	881	361	435	58	488	6	17	27
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	191	470	11	38	881	361	435	58	488	6	17	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	191	470	11	38	881	361	435	58	488	6	17	27
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	191	470	11	38	881	361	435	58	488	6	17	27
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.95	0.05	1.00	2.00	1.00	0.88	0.12	1.00	0.12	0.34	0.54
Final Sat.:	2880	3127	73	1600	3200	1600	1412	188	1600	192	544	864
Capacity Analysis Module:												
Vol/Sat:	0.07	0.15	0.15	0.02	0.28	0.23	0.31	0.31	0.31	0.03	0.03	0.03
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Avalon Blvd & Artesia Blvd/SR 90

Cycle (sec):	100	Critical Vol./Cap.(X):	0.602
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	1262	230	165	1161	0	0	0	0	421	0	453
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1262	230	165	1161	0	0	0	0	421	0	453
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1262	230	165	1161	0	0	0	0	421	0	453
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1262	230	165	1161	0	0	0	0	421	0	453
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1262	230	165	1161	0	0	0	0	421	0	453
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.45	xxxx	1.55
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	2312	0	2488
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.14	0.06	0.24	0.00	0.00	0.00	0.00	0.18	0.00	0.18
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Avalon Blvd & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.895
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	98	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	1 0	1 1	1	1 0	1 1	1
Volume Module:												
Base Vol:	245	987	204	264	1054	266	290	805	592	122	21	191
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	245	987	204	264	1054	266	290	805	592	122	21	191
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	245	987	204	264	1054	266	290	805	592	122	21	191
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	245	987	204	264	1054	266	290	805	592	122	21	191
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	245	987	204	264	1054	266	290	805	592	122	21	191
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.40	0.60	1.00	1.73	1.27	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3833	967	1600	2766	2034	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.15	0.21	0.13	0.17	0.28	0.27	0.18	0.29	0.29	0.08	0.01	0.06
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Avalon Blvd & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.792
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	65	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	150	973	249	431	1162	86	115	668	143	210	719	357
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	973	249	431	1162	86	115	668	143	210	719	357
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	973	249	431	1162	86	115	668	143	210	719	357
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	973	249	431	1162	86	115	668	143	210	719	357
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	973	249	431	1162	86	115	668	143	210	719	357
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.79	0.21	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	4469	331	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.20	0.16	0.15	0.26	0.26	0.07	0.21	0.09	0.13	0.22	0.22
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Avalon Blvd & 184th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.512
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	0 0	1! 0	0	1 0	1! 0	1
Volume Module:												
Base Vol:	34	1248	39	56	1433	33	74	0	30	51	0	48
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	34	1248	39	56	1433	33	74	0	30	51	0	48
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	34	1248	39	56	1433	33	74	0	30	51	0	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	34	1248	39	56	1433	33	74	0	30	51	0	48
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	34	1248	39	56	1433	33	74	0	30	51	0	48
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.93	0.07	0.71	0.00	0.29	1.55	0.00	1.45
Final Sat.:	1600	4800	1600	1600	4692	108	1138	0	462	2473	0	2327
Capacity Analysis Module:												
Vol/Sat:	0.02	0.26	0.02	0.04	0.31	0.31	0.06	0.00	0.07	0.02	0.00	0.02
Crit Moves:	****				****				****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Avalon Blvd & University Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.767
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	0 0	1
Volume Module:												
Base Vol:	0	1128	350	355	1237	0	0	0	0	494	0	235
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1128	350	355	1237	0	0	0	0	494	0	235
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1128	350	355	1237	0	0	0	0	494	0	235
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1128	350	355	1237	0	0	0	0	494	0	235
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1128	350	355	1237	0	0	0	0	494	0	235
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.24	0.22	0.12	0.26	0.00	0.00	0.00	0.00	0.31	0.00	0.15
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Avalon Blvd & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.647
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2	1 0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	91	1255	0	0	1636	93	208	0	173	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	91	1255	0	0	1636	93	208	0	173	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	91	1255	0	0	1636	93	208	0	173	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	91	1255	0	0	1636	93	208	0	173	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	91	1255	0	0	1636	93	208	0	173	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.84	0.16	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4542	258	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.26	0.00	0.00	0.36	0.36	0.13	0.00	0.11	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Avalon Blvd & Elsmere Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.486
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	0	1321	73	60	1748	0	0	0	0	35	0	35
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1321	73	60	1748	0	0	0	0	35	0	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1321	73	60	1748	0	0	0	0	35	0	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1321	73	60	1748	0	0	0	0	35	0	35
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1321	73	60	1748	0	0	0	0	35	0	35
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.84	0.16	1.00	3.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	4549	251	1600	4800	0	1600	1600	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.29	0.29	0.04	0.36	0.00	0.00	0.00	0.00	0.02	0.00	0.02
Crit Moves:	****				****					****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Avalon Blvd & Turmont St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.670
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	1 0	3 0	1	1 0	1 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	222	1334	195	104	1704	92	64	14	135	85	16	61
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	222	1334	195	104	1704	92	64	14	135	85	16	61
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	222	1334	195	104	1704	92	64	14	135	85	16	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	222	1334	195	104	1704	92	64	14	135	85	16	61
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	222	1334	195	104	1704	92	64	14	135	85	16	61
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.62	0.38	1.00	3.00	1.00	1.00	1.00	1.00	1.00	0.21	0.79
Final Sat.:	2880	4188	612	1600	4800	1600	1600	1600	1600	1600	332	1268
Capacity Analysis Module:												
Vol/Sat:	0.08	0.32	0.32	0.07	0.36	0.06	0.04	0.01	0.08	0.05	0.05	0.05
Crit Moves:	****				****				****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Avalon Blvd & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.003
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	172	1151	181	325	1114	423	334	1008	245	256	658	183
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	172	1151	181	325	1114	423	334	1008	245	256	658	183
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	172	1151	181	325	1114	423	334	1008	245	256	658	183
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	172	1151	181	325	1114	423	334	1008	245	256	658	183
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	172	1151	181	325	1114	423	334	1008	245	256	658	183
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.17	0.83	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	3479	1321	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.24	0.11	0.11	0.32	0.32	0.21	0.32	0.15	0.16	0.21	0.11
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Avalon Blvd & I-405 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.595
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 1	0 0	1
Volume Module:												
Base Vol:	348	1197	0	0	1516	535	0	0	0	186	2	502
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	348	1197	0	0	1516	535	0	0	0	186	2	502
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	348	1197	0	0	1516	0	0	0	0	186	2	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	348	1197	0	0	1516	0	0	0	0	186	2	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	348	1197	0	0	1516	0	0	0	0	186	2	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.98	0.02	1.00
Final Sat.:	2880	3200	0	0	4800	1600	0	0	0	3166	34	1600
Capacity Analysis Module:												
Vol/Sat:	0.12	0.37	0.00	0.00	0.32	0.00	0.00	0.00	0.00	0.06	0.06	0.00
Crit Moves:	****				****					****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avalon Blvd & I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.642
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	2	0 1	2 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	53	1164	186	0	1179	528	345	226	457	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	53	1164	186	0	1179	528	345	226	457	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	53	1164	186	0	1179	528	345	226	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	53	1164	186	0	1179	528	345	226	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	53	1164	186	0	1179	528	345	226	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.72	0.28	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2759	441	0	3200	1600	2880	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.42	0.42	0.00	0.37	0.33	0.12	0.07	0.00	0.00	0.00	0.00
Crit Moves:		****		****			****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 Main St & SR 91 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.613
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	1	630	137	109	787	0	0	0	0	255	0	329
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	630	137	109	787	0	0	0	0	255	0	329
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	630	137	109	787	0	0	0	0	255	0	329
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	630	137	109	787	0	0	0	0	255	0	329
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	1	630	137	109	787	0	0	0	0	255	0	329
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.64	0.36	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	2628	572	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.24	0.24	0.07	0.25	0.00	0.00	0.00	0.00	0.16	0.00	0.21
Crit Moves:		****		****								****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.899
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	104	465	150	225	664	172	59	654	144	154	249	238
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	104	465	150	225	664	172	59	654	144	154	249	238
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	104	465	150	225	664	172	59	654	144	154	249	238
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	104	465	150	225	664	172	59	654	144	154	249	238
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	104	465	150	225	664	172	59	654	144	154	249	238
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.51	0.49	1.00	1.59	0.41	1.00	1.64	0.36	1.00	1.02	0.98
Final Sat.:	1600	2420	780	1600	2542	658	1600	2623	577	1600	1636	1564
Capacity Analysis Module:												
Vol/Sat:	0.07	0.19	0.19	0.14	0.26	0.26	0.04	0.25	0.25	0.10	0.15	0.15
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Main St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.899
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	169	408	163	165	684	87	82	998	195	128	637	137
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	169	408	163	165	684	87	82	998	195	128	637	137
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	169	408	163	165	684	87	82	998	195	128	637	137
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	169	408	163	165	684	87	82	998	195	128	637	137
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	169	408	163	165	684	87	82	998	195	128	637	137
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.77	0.23	1.00	1.67	0.33	1.00	1.65	0.35
Final Sat.:	1600	3200	1600	1600	2839	361	1600	2677	523	1600	2634	566
Capacity Analysis Module:												
Vol/Sat:	0.11	0.13	0.10	0.10	0.24	0.24	0.05	0.37	0.37	0.08	0.24	0.24
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 Figueroa St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.745
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	106	505	145	75	722	108	115	989	221	68	812	88
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	106	505	145	75	722	108	115	989	221	68	812	88
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	106	505	145	75	722	108	115	989	221	68	812	88
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	106	505	145	75	722	108	115	989	221	68	812	88
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	106	505	145	75	722	108	115	989	221	68	812	88
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.55	0.45	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.80	0.20
Final Sat.:	1600	2486	714	1600	3200	1600	1600	3200	1600	1600	2887	313
Capacity Analysis Module:												
Vol/Sat:	0.07	0.20	0.20	0.05	0.23	0.07	0.07	0.31	0.14	0.04	0.28	0.28
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 I-110 NB On-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.518
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	2	0	1	1	0	1	0	2	0	1
Volume Module:												
Base Vol:	0	0	0	0	0	0	459	1336	0	0	743	327
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	459	1336	0	0	743	327
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	459	1336	0	0	743	327
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	459	1336	0	0	743	327
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	459	1336	0	0	743	327
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	1600	0	0	0	0	3200	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.42	0.00	0.00	0.23	0.20
Crit Moves:								****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 I-110 SB Off-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.838
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	76	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	0 0	2 0	0	0 0	3 0	0
Volume Module:												
Base Vol:	0	0	0	385	0	471	0	1419	0	0	737	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	385	0	471	0	1419	0	0	737	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	385	0	471	0	1419	0	0	737	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	385	0	471	0	1419	0	0	737	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	385	0	471	0	1419	0	0	737	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.24	0.00	0.29	0.00	0.44	0.00	0.00	0.15	0.00
Crit Moves:						****		****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 Central Ave & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.760
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	59	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	2 0	2 0	1	2 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	153	538	35	176	662	339	509	712	217	18	367	213
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	153	538	35	176	662	339	509	712	217	18	367	213
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	153	538	35	176	662	339	509	712	217	18	367	213
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	153	538	35	176	662	339	509	712	217	18	367	213
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	153	538	35	176	662	339	509	712	217	18	367	213
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.53	0.47	1.00	1.27	0.73
Final Sat.:	1600	3200	1600	2880	3200	1600	2880	2453	747	1600	2025	1175
Capacity Analysis Module:												
Vol/Sat:	0.10	0.17	0.02	0.06	0.21	0.21	0.18	0.29	0.29	0.01	0.18	0.18
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 Hamilton Ave & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.945
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	129	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	24	34	283	295	318	63	13	640	199	355	500	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	24	34	283	295	318	63	13	640	199	355	500	98
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	24	34	283	295	318	63	13	640	199	355	500	98
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	34	283	295	318	63	13	640	199	355	500	98
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	24	34	283	295	318	63	13	640	199	355	500	98
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.67	0.33	1.00	1.53	0.47	1.00	1.67	0.33
Final Sat.:	1600	1600	1600	1600	2671	529	1600	2441	759	1600	2676	524
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.18	0.18	0.12	0.12	0.01	0.26	0.26	0.22	0.19	0.19
Crit Moves:			****	****				****		****		

Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	All-way stop	Delay (sec / veh):	131.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.598

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	62	539	725	171	334	261
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	62	539	725	171	334	261
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	135	181	43	84	65
Total Analysis Volume [veh/h]	62	539	725	171	334	261
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	474	539	725	484	439	503
Degree of Utilization, x	0.13	1.03	1.60	0.35	0.68	0.59

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.45	15.33	40.61	1.57	4.93	3.79
95th-Percentile Queue Length [ft]	11.20	383.35	1015.32	39.37	123.31	94.64
Approach Delay [s/veh]	67.67		245.08		23.08	
Approach LOS	F		F		C	
Intersection Delay [s/veh]	130.97					
Intersection LOS	F					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 Figueroa St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.048
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	64	411	396	187	700	208	69	1034	133	350	679	88
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	64	411	396	187	700	208	69	1034	133	350	679	88
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	64	411	396	187	700	208	69	1034	133	350	679	88
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	64	411	396	187	700	208	69	1034	133	350	679	88
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	64	411	396	187	700	208	69	1034	133	350	679	88
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.77	0.23	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	2835	365	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.25	0.12	0.22	0.13	0.04	0.36	0.36	0.22	0.21	0.06
Crit Moves:			****	****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 Figueroa St & I-110 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.740
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	2 0	1	1 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	508	424	0	0	897	303	447	0	139	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	508	424	0	0	897	303	447	0	139	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	508	424	0	0	897	303	447	0	139	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	508	424	0	0	897	303	447	0	139	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	508	424	0	0	897	303	447	0	139	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	2.00	1.00	1.53	0.00	0.47	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	3200	1600	2441	0	759	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.18	0.13	0.00	0.00	0.28	0.19	0.18	0.00	0.18	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 SR 91 EB Ramps & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.626
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Street Name:	SR 91 EB Ramps						Albertoni St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	2 0	2 0	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	0	430	0	343	227	823	0	0	356	63
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	430	0	343	227	823	0	0	356	63
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	430	0	343	227	823	0	0	356	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	430	0	343	227	823	0	0	356	63
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	430	0	343	227	823	0	0	356	63
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.70	0.30
Final Sat.:	0	0	0	1600	0	1600	2880	3200	0	0	2719	481
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.27	0.00	0.21	0.08	0.26	0.00	0.00	0.13	0.13
Crit Moves:				****				****		****		

Intersection Level Of Service Report
Intersection 29: Main Street & Broadway

Control Type:	Two-way stop	Delay (sec / veh):	19.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.597

Intersection Setup

Name	Main Street		Main Street		Broadway	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Main Street		Main Street		Broadway	
Base Volume Input [veh/h]	217	748	763	18	0	495
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	217	748	763	18	0	495
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	54	187	191	5	0	124
Total Analysis Volume [veh/h]	217	748	763	18	0	495
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.60	0.83	0.47	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	19.07	11.87	7.90	0.00	0.00	0.00
Movement LOS	C	B	A	A		A
95th-Percentile Queue Length [veh]	1.23	2.08	0.92	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	30.74	52.08	22.91	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	13.49		7.72		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	8.50					
Intersection LOS	C					

Future Base Conditions
(City of Carson) 2020
Saturday Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Main St & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.680
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	1 0	1 0	2	0 0	0 0	1!	0 0	1 0	1!	0 0
Volume Module:												
Base Vol:	0	303	168	341	314	0	0	0	0	143	0	352
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	303	168	341	314	0	0	0	0	143	0	352
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	303	168	341	314	0	0	0	0	143	0	352
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	303	168	341	314	0	0	0	0	143	0	352
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	303	168	341	314	0	0	0	0	143	0	352
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.29	0.71	1.00	2.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Final Sat.:	0	2059	1141	1600	3200	0	0	1600	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.15	0.15	0.21	0.10	0.00	0.00	0.00	0.00	0.09	0.00	0.22
Crit Moves:		****		****								****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Main St & 1-405 NB off

Cycle (sec):	100	Critical Vol./Cap.(X):	0.453
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	0 1	0 1	0
Volume Module:												
Base Vol:	14	395	0	0	556	26	0	0	0	259	93	148
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	14	395	0	0	556	26	0	0	0	259	93	148
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	14	395	0	0	556	26	0	0	0	259	93	148
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	395	0	0	556	26	0	0	0	259	93	148
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	14	395	0	0	556	26	0	0	0	259	93	148
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.91	0.09	0.00	0.00	0.00	1.00	0.41	0.59
Final Sat.:	1600	3200	0	0	3057	143	0	0	0	1600	653	947
Capacity Analysis Module:												
Vol/Sat:	0.01	0.12	0.00	0.00	0.18	0.18	0.00	0.00	0.00	0.16	0.14	0.16
Crit Moves:	****				****					****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Main St & I-405 SB On-Ramp

Cycle (sec):	100	Critical Vol./Cap.(X):	0.449
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	1 0	0 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	398	248	143	671	0	19	78	15	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	398	248	143	671	0	19	78	15	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	398	248	143	671	0	19	78	15	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	398	248	143	671	0	19	78	15	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	398	248	143	671	0	19	78	15	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.23	0.77	1.00	2.00	0.00	1.00	0.84	0.16	0.00	0.00	0.00
Final Sat.:	0	1972	1228	1600	3200	0	1600	1342	258	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.20	0.09	0.21	0.00	0.01	0.06	0.06	0.00	0.00	0.00
Crit Moves:		****		****				****				

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Avalon Blvd & Artesia Blvd/SR 90

Cycle (sec):	100	Critical Vol./Cap.(X):	0.466
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	874	274	114	865	0	0	0	0	462	0	220
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	874	274	114	865	0	0	0	0	462	0	220
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	874	274	114	865	0	0	0	0	462	0	220
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	874	274	114	865	0	0	0	0	462	0	220
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	874	274	114	865	0	0	0	0	462	0	220
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.18	0.17	0.04	0.18	0.00	0.00	0.00	0.00	0.14	0.00	0.14
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Avalon Blvd & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.473
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2	1 0	1 0	0	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	74	1300	0	0	1232	53	95	0	75	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	74	1300	0	0	1232	53	95	0	75	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	74	1300	0	0	1232	53	95	0	75	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	74	1300	0	0	1232	53	95	0	75	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	74	1300	0	0	1232	53	95	0	75	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.88	0.12	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4602	198	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.27	0.00	0.00	0.27	0.27	0.06	0.00	0.05	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Avalon Blvd & Elsmere Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.439
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	0	1302	53	49	1261	0	0	0	0	41	0	26
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1302	53	49	1261	0	0	0	0	41	0	26
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1302	53	49	1261	0	0	0	0	41	0	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1302	53	49	1261	0	0	0	0	41	0	26
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1302	53	49	1261	0	0	0	0	41	0	26
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.88	0.12	1.00	3.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	4612	188	1600	4800	0	1600	1600	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.28	0.28	0.03	0.26	0.00	0.00	0.00	0.00	0.03	0.00	0.02
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Avalon Blvd & Turmont St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.605
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	1 0	3 0	1	1 0	1 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	201	1345	150	39	1323	73	64	19	134	122	18	46
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	201	1345	150	39	1323	73	64	19	134	122	18	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	201	1345	150	39	1323	73	64	19	134	122	18	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	201	1345	150	39	1323	73	64	19	134	122	18	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	201	1345	150	39	1323	73	64	19	134	122	18	46
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.70	0.30	1.00	3.00	1.00	1.00	1.00	1.00	1.00	0.28	0.72
Final Sat.:	2880	4318	482	1600	4800	1600	1600	1600	1600	1600	450	1150
Capacity Analysis Module:												
Vol/Sat:	0.07	0.31	0.31	0.02	0.28	0.05	0.04	0.01	0.08	0.08	0.04	0.04
Crit Moves:	****				****				****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Avalon Blvd & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.994
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	329	1009	162	300	928	393	429	502	270	241	464	186
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	329	1009	162	300	928	393	429	502	270	241	464	186
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	329	1009	162	300	928	393	429	502	270	241	464	186
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	329	1009	162	300	928	393	429	502	270	241	464	186
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	329	1009	162	300	928	393	429	502	270	241	464	186
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.11	0.89	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	3372	1428	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.21	0.21	0.10	0.10	0.28	0.28	0.27	0.16	0.17	0.15	0.15	0.12
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Avalon Blvd & I-405 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.714
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 1	0 0	1
Volume Module:												
Base Vol:	529	1512	0	0	1424	686	0	0	0	427	0	590
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	529	1512	0	0	1424	686	0	0	0	427	0	590
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	529	1512	0	0	1424	0	0	0	0	427	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	529	1512	0	0	1424	0	0	0	0	427	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	529	1512	0	0	1424	0	0	0	0	427	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	2880	3200	0	0	4800	1600	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.18	0.47	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.13	0.00	0.00
Crit Moves:	****				****					****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avalon Blvd & I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	1.076
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0 1		1 0	0 0 2		0 1	2 0 2		0 1	0 0 0		0 0
Volume Module:												
Base Vol:	278	1183	178	0	1030	796	879	273	683	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	278	1183	178	0	1030	796	879	273	683	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	278	1183	178	0	1030	796	879	273	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	278	1183	178	0	1030	796	879	273	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	278	1183	178	0	1030	796	879	273	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.74	0.26	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2781	419	0	3200	1600	2880	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.17	0.43	0.43	0.00	0.32	0.50	0.31	0.09	0.00	0.00	0.00	0.00
Crit Moves:	****					****	****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 Main St & SR 91 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.341
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	0	312	138	35	333	0	0	0	0	126	0	108
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	312	138	35	333	0	0	0	0	126	0	108
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	312	138	35	333	0	0	0	0	126	0	108
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	312	138	35	333	0	0	0	0	126	0	108
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	312	138	35	333	0	0	0	0	126	0	108
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.39	0.61	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	2219	981	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.14	0.14	0.02	0.10	0.00	0.00	0.00	0.00	0.08	0.00	0.07
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.553
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	47	328	124	163	374	74	36	306	46	99	178	152
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	47	328	124	163	374	74	36	306	46	99	178	152
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	47	328	124	163	374	74	36	306	46	99	178	152
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	47	328	124	163	374	74	36	306	46	99	178	152
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	47	328	124	163	374	74	36	306	46	99	178	152
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.45	0.55	1.00	1.67	0.33	1.00	1.74	0.26	1.00	1.08	0.92
Final Sat.:	1600	2322	878	1600	2671	529	1600	2782	418	1600	1726	1474
Capacity Analysis Module:												
Vol/Sat:	0.03	0.14	0.14	0.10	0.14	0.14	0.02	0.11	0.11	0.06	0.10	0.10
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 I-110 NB On-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.406
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	2	0	1	1	0	1	0	2	0	1
Volume Module:												
Base Vol:	0	0	0	0	0	0	384	814	0	4	517	297
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	384	814	0	4	517	297
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	384	814	0	4	517	297
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	384	814	0	4	517	297
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	384	814	0	4	517	297
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	1600	0	0	0	0	3200	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.25	0.00	0.00	0.16	0.19
Crit Moves:							****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 I-110 SB Off-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.637
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	0 0	2 0	0	0 0	3 0	0
Volume Module:												
Base Vol:	0	0	0	329	0	364	0	992	0	0	557	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	329	0	364	0	992	0	0	557	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	329	0	364	0	992	0	0	557	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	329	0	364	0	992	0	0	557	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	329	0	364	0	992	0	0	557	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.21	0.00	0.23	0.00	0.31	0.00	0.00	0.12	0.00
Crit Moves:						****		****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 SR 91 EB Ramps & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.442
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Street Name:	SR 91 EB Ramps						Albertoni St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	2 0	2 0	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	0	209	0	164	288	266	0	0	287	68
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	209	0	164	288	266	0	0	287	68
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	209	0	164	288	266	0	0	287	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	209	0	164	288	266	0	0	287	68
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	209	0	164	288	266	0	0	287	68
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.62	0.38
Final Sat.:	0	0	0	1600	0	1600	2880	3200	0	0	2587	613
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.10	0.10	0.08	0.00	0.00	0.11	0.11
Crit Moves:				****			****				****	

Future with Project Conditions
(City of Carson) 2020
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Main St & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.641
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0 1	0	1	0 2	0 0	0	0 1!	0 0	1	0 1!	0 0
Volume Module:												
Base Vol:	4	478	190	269	555	0	1	0	3	199	0	259
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	478	190	269	555	0	1	0	3	199	0	259
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	478	190	269	555	0	1	0	3	199	0	259
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	478	190	269	555	0	1	0	3	199	0	259
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	4	478	190	269	555	0	1	0	3	199	0	259
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	1.42	0.57	1.00	2.00	0.00	0.25	0.00	0.75	1.00	0.00	1.00
Final Sat.:	19	2276	905	1600	3200	0	400	0	1200	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.21	0.17	0.17	0.00	0.00	0.00	0.00	0.12	0.00	0.16
Crit Moves:		****		****			****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Main St & 1-405 NB off

Cycle (sec):	100	Critical Vol./Cap.(X):	0.600
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	0 1	0 1	0
Volume Module:												
Base Vol:	28	710	0	0	779	71	0	0	0	107	327	259
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	28	710	0	0	779	71	0	0	0	107	327	259
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	28	710	0	0	779	71	0	0	0	107	327	259
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	28	710	0	0	779	71	0	0	0	107	327	259
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	28	710	0	0	779	71	0	0	0	107	327	259
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.83	0.17	0.00	0.00	0.00	0.31	0.94	0.75
Final Sat.:	1600	3200	0	0	2933	267	0	0	0	494	1510	1196
Capacity Analysis Module:												
Vol/Sat:	0.02	0.22	0.00	0.00	0.27	0.27	0.00	0.00	0.00	0.07	0.22	0.22
Crit Moves:	****				****						****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Main St & I-405 SB On-Ramp

Cycle (sec):	100	Critical Vol./Cap.(X):	0.486
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	1 0	0 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	651	69	164	780	0	29	72	21	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	651	69	164	780	0	29	72	21	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	651	69	164	780	0	29	72	21	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	651	69	164	780	0	29	72	21	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	651	69	164	780	0	29	72	21	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.81	0.19	1.00	2.00	0.00	1.00	0.77	0.23	0.00	0.00	0.00
Final Sat.:	0	2893	307	1600	3200	0	1600	1239	361	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.23	0.22	0.10	0.24	0.00	0.02	0.06	0.06	0.00	0.00	0.00
Crit Moves:		****		****				****				

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Main St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.769
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	74	590	360	65	538	151	129	755	34	267	1058	68
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	74	590	360	65	538	151	129	755	34	267	1058	68
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	74	590	360	65	538	151	129	755	34	267	1058	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	74	590	360	65	538	151	129	755	34	267	1058	68
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	74	590	360	65	538	151	129	755	34	267	1058	68
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.24	0.76	1.00	1.56	0.44	1.00	2.87	0.13	1.00	2.82	0.18
Final Sat.:	1600	1987	1213	1600	2499	701	1600	4593	207	1600	4510	290
Capacity Analysis Module:												
Vol/Sat:	0.05	0.30	0.30	0.04	0.22	0.22	0.08	0.16	0.16	0.17	0.23	0.23
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Main St & Torrance Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.662
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	1 0	2 0	1	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	317	659	7	13	567	261	321	18	184	13	55	32
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	317	659	7	13	567	261	321	18	184	13	55	32
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	317	659	7	13	567	261	321	18	184	13	55	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	317	659	7	13	567	261	321	18	184	13	55	32
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	317	659	7	13	567	261	321	18	184	13	55	32
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.98	0.02	1.00	2.00	1.00	0.95	0.05	1.00	0.13	0.55	0.32
Final Sat.:	2880	3166	34	1600	3200	1600	1515	85	1600	208	880	512
Capacity Analysis Module:												
Vol/Sat:	0.11	0.21	0.21	0.01	0.18	0.16	0.21	0.21	0.12	0.06	0.06	0.06
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Avalon Blvd & Artesia Blvd/SR 90

Cycle (sec):	100	Critical Vol./Cap.(X):	0.573
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	974	173	179	1160	0	0	0	0	392	0	606
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	974	173	179	1160	0	0	0	0	392	0	606
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	974	173	179	1160	0	0	0	0	392	0	606
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	974	173	179	1160	0	0	0	0	392	0	606
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	974	173	179	1160	0	0	0	0	392	0	606
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.17	0.01	1.82
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	1885	0	2915
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.11	0.06	0.24	0.00	0.00	0.00	0.00	0.21	0.00	0.21
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Avalon Blvd & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.666
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	1 0	1 1	1	1 0	1 1	1
Volume Module:												
Base Vol:	183	787	190	342	779	380	183	130	314	102	20	237
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	183	787	190	342	779	380	183	130	314	102	20	237
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	183	787	190	342	779	380	183	130	314	102	20	237
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	183	787	190	342	779	380	183	130	314	102	20	237
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	183	787	190	342	779	380	183	130	314	102	20	237
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.02	0.98	1.00	1.00	2.00	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3226	1574	1600	1600	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.11	0.16	0.12	0.21	0.24	0.24	0.11	0.08	0.10	0.06	0.01	0.07
Crit Moves:		****		****			****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Avalon Blvd & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.632
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	137	794	218	383	829	79	86	510	82	119	425	223
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	137	794	218	383	829	79	86	510	82	119	425	223
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	137	794	218	383	829	79	86	510	82	119	425	223
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	137	794	218	383	829	79	86	510	82	119	425	223
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	137	794	218	383	829	79	86	510	82	119	425	223
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.74	0.26	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	4382	418	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.17	0.14	0.13	0.19	0.19	0.05	0.16	0.05	0.07	0.13	0.14
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Avalon Blvd & 184th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.420
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	0 0	1! 0	0	1 0	1! 0	1
Volume Module:												
Base Vol:	19	1095	63	37	996	8	58	0	45	8	0	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	19	1095	63	37	996	8	58	0	45	8	0	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	19	1095	63	37	996	8	58	0	45	8	0	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	1095	63	37	996	8	58	0	45	8	0	11
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	19	1095	63	37	996	8	58	0	45	8	0	11
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.98	0.02	0.56	0.00	0.44	1.26	0.00	1.74
Final Sat.:	1600	4800	1600	1600	4762	38	901	0	699	2021	0	2779
Capacity Analysis Module:												
Vol/Sat:	0.01	0.23	0.04	0.02	0.21	0.21	0.06	0.00	0.06	0.00	0.00	0.00
Crit Moves:		****		****			****			****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Avalon Blvd & University Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.678
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	0 0	1
Volume Module:												
Base Vol:	0	955	489	292	758	0	0	0	0	255	0	274
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	955	489	292	758	0	0	0	0	255	0	274
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	955	489	292	758	0	0	0	0	255	0	274
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	955	489	292	758	0	0	0	0	255	0	274
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	955	489	292	758	0	0	0	0	255	0	274
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.31	0.10	0.16	0.00	0.00	0.00	0.00	0.16	0.00	0.17
Crit Moves:			****	****								****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Avalon Blvd & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.469
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2 1	0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	130	1323	0	0	874	125	127	0	71	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	1323	0	0	874	125	127	0	71	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	1323	0	0	874	125	127	0	71	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	1323	0	0	874	125	127	0	71	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	1323	0	0	874	125	127	0	71	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.62	0.38	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4199	601	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.28	0.00	0.00	0.21	0.21	0.08	0.00	0.04	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Avalon Blvd & Elsmere Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.492
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	0	1398	68	35	917	0	1	0	1	103	0	41
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1398	68	35	917	0	1	0	1	103	0	41
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1398	68	35	917	0	1	0	1	103	0	41
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1398	68	35	917	0	1	0	1	103	0	41
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1398	68	35	917	0	1	0	1	103	0	41
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.86	0.14	1.00	3.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	1600	4577	223	1600	4800	0	1600	0	1600	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.31	0.31	0.02	0.19	0.00	0.00	0.00	0.00	0.06	0.00	0.03
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Avalon Blvd & Turmont St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.636
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	1 0	3 0	1	1 0	1 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	217	1353	115	69	880	97	65	9	137	162	13	103
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	217	1353	115	69	880	97	65	9	137	162	13	103
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	217	1353	115	69	880	97	65	9	137	162	13	103
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	217	1353	115	69	880	97	65	9	137	162	13	103
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	217	1353	115	69	880	97	65	9	137	162	13	103
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.76	0.24	1.00	3.00	1.00	1.00	1.00	1.00	1.00	0.11	0.89
Final Sat.:	2880	4424	376	1600	4800	1600	1600	1600	1600	1600	179	1421
Capacity Analysis Module:												
Vol/Sat:	0.08	0.31	0.31	0.04	0.18	0.06	0.04	0.01	0.09	0.10	0.07	0.07
Crit Moves:		****		****					****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Avalon Blvd & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.923
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	113	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	161	1011	135	210	731	322	364	554	98	186	881	128
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	161	1011	135	210	731	322	364	554	98	186	881	128
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	161	1011	135	210	731	322	364	554	98	186	881	128
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	161	1011	135	210	731	322	364	554	98	186	881	128
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	161	1011	135	210	731	322	364	554	98	186	881	128
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.08	0.92	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	3332	1468	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.21	0.08	0.07	0.22	0.22	0.23	0.17	0.06	0.12	0.28	0.08
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Avalon Blvd & I-405 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.515
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 1	0 0	1
Volume Module:												
Base Vol:	475	1221	0	0	865	291	0	0	0	106	0	509
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	475	1221	0	0	865	291	0	0	0	106	0	509
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	475	1221	0	0	865	0	0	0	0	106	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	475	1221	0	0	865	0	0	0	0	106	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	475	1221	0	0	865	0	0	0	0	106	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	2880	3200	0	0	4800	1600	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.16	0.38	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.03	0.00	0.00
Crit Moves:		****								****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avalon Blvd & I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.668
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	2	0 1	2 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	26	1115	140	0	616	358	507	32	594	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	26	1115	140	0	616	358	507	32	594	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	26	1115	140	0	616	358	507	32	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	1115	140	0	616	358	507	32	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	26	1115	140	0	616	358	507	32	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.78	0.22	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2843	357	0	3200	1600	2880	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.39	0.39	0.00	0.19	0.22	0.18	0.01	0.00	0.00	0.00	0.00
Crit Moves:		****		****			****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 Main St & SR 91 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.662
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	0	572	121	66	536	0	0	0	0	486	0	409
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	572	121	66	536	0	0	0	0	486	0	409
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	572	121	66	536	0	0	0	0	486	0	409
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	572	121	66	536	0	0	0	0	486	0	409
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	572	121	66	536	0	0	0	0	486	0	409
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.65	0.35	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	2641	559	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.22	0.04	0.17	0.00	0.00	0.00	0.00	0.30	0.00	0.26
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.729
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	115	422	139	165	475	280	32	305	77	157	423	230
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	115	422	139	165	475	280	32	305	77	157	423	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	115	422	139	165	475	280	32	305	77	157	423	230
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	115	422	139	165	475	280	32	305	77	157	423	230
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	115	422	139	165	475	280	32	305	77	157	423	230
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.50	0.50	1.00	1.26	0.74	1.00	1.60	0.40	1.00	1.30	0.70
Final Sat.:	1600	2407	793	1600	2013	1187	1600	2555	645	1600	2073	1127
Capacity Analysis Module:												
Vol/Sat:	0.07	0.18	0.18	0.10	0.24	0.24	0.02	0.12	0.12	0.10	0.20	0.20
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Main St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.647
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	130	475	118	63	462	96	69	420	141	186	539	121
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	475	118	63	462	96	69	420	141	186	539	121
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	475	118	63	462	96	69	420	141	186	539	121
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	475	118	63	462	96	69	420	141	186	539	121
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	475	118	63	462	96	69	420	141	186	539	121
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.66	0.34	1.00	1.50	0.50	1.00	1.63	0.37
Final Sat.:	1600	3200	1600	1600	2649	551	1600	2396	804	1600	2613	587
Capacity Analysis Module:												
Vol/Sat:	0.08	0.15	0.07	0.04	0.17	0.17	0.04	0.18	0.18	0.12	0.21	0.21
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 Figueroa St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.641
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	153	575	90	49	404	121	153	574	145	61	584	77
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	153	575	90	49	404	121	153	574	145	61	584	77
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	153	575	90	49	404	121	153	574	145	61	584	77
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	153	575	90	49	404	121	153	574	145	61	584	77
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	153	575	90	49	404	121	153	574	145	61	584	77
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.73	0.27	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.77	0.23
Final Sat.:	1600	2767	433	1600	3200	1600	1600	3200	1600	1600	2827	373
Capacity Analysis Module:												
Vol/Sat:	0.10	0.21	0.21	0.03	0.13	0.08	0.10	0.18	0.09	0.04	0.21	0.21
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 I-110 NB On-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.390
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	2	0	1	1	0	1	0	2	0	1
Volume Module:												
Base Vol:	0	0	0	0	0	0	164	929	0	0	600	241
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	164	929	0	0	600	241
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	164	929	0	0	600	241
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	164	929	0	0	600	241
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	164	929	0	0	600	241
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	1600	0	0	0	0	3200	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.29	0.00	0.00	0.19	0.15
Crit Moves:								****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 I-110 SB Off-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.808
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	69	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	0 0	2 0	0	0 0	3 0	0
Volume Module:												
Base Vol:	0	0	0	283	0	747	0	772	0	0	625	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	283	0	747	0	772	0	0	625	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	283	0	747	0	772	0	0	625	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	283	0	747	0	772	0	0	625	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	283	0	747	0	772	0	0	625	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.18	0.00	0.47	0.00	0.24	0.00	0.00	0.13	0.00
Crit Moves:						****		****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 Central Ave & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.816
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	70	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	2 0	2 0	1	2 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	132	537	23	196	744	680	223	220	132	23	301	118
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	132	537	23	196	744	680	223	220	132	23	301	118
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	132	537	23	196	744	680	223	220	132	23	301	118
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	132	537	23	196	744	680	223	220	132	23	301	118
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	132	537	23	196	744	680	223	220	132	23	301	118
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.25	0.75	1.00	1.44	0.56
Final Sat.:	1600	3200	1600	2880	3200	1600	2880	2000	1200	1600	2299	901
Capacity Analysis Module:												
Vol/Sat:	0.08	0.17	0.01	0.07	0.23	0.43	0.08	0.11	0.11	0.01	0.13	0.13
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 Hamilton Ave & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.612
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	59	131	158	51	64	14	37	296	81	422	744	356
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	59	131	158	51	64	14	37	296	81	422	744	356
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	59	131	158	51	64	14	37	296	81	422	744	356
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	59	131	158	51	64	14	37	296	81	422	744	356
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	59	131	158	51	64	14	37	296	81	422	744	356
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.64	0.36	1.00	1.57	0.43	1.00	1.35	0.65
Final Sat.:	1600	1600	1600	1600	2626	574	1600	2512	688	1600	2164	1036
Capacity Analysis Module:												
Vol/Sat:	0.04	0.08	0.10	0.03	0.02	0.02	0.02	0.12	0.12	0.26	0.34	0.34
Crit Moves:			****	****				****		****		

Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	All-way stop	Delay (sec / veh):	60.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.106

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	80	111	375	96	781	327
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	80	111	375	96	781	327
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	28	94	24	195	82
Total Analysis Volume [veh/h]	80	111	375	96	781	327
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	457	502	455	485	554	556
Degree of Utilization, x	0.18	0.22	0.82	0.20	1.11	1.00

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.63	0.84	7.88	0.73	18.09	14.29
95th-Percentile Queue Length [ft]	15.71	20.98	197.01	18.23	452.33	357.34
Approach Delay [s/veh]	12.05		32.86		80.12	
Approach LOS	B		D		F	
Intersection Delay [s/veh]	60.20					
Intersection LOS	F					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 Figueroa St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.758
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	59	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	195	647	381	51	350	352	57	384	78	173	899	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	195	647	381	51	350	352	57	384	78	173	899	98
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	195	647	381	51	350	352	57	384	78	173	899	98
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	195	647	381	51	350	352	57	384	78	173	899	98
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	195	647	381	51	350	352	57	384	78	173	899	98
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.66	0.34	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	2660	540	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.12	0.20	0.24	0.03	0.11	0.22	0.04	0.14	0.14	0.11	0.28	0.06
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 Figueroa St & I-110 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.732
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	2 0	1	1 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	692	605	0	0	415	194	612	0	225	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	692	605	0	0	415	194	612	0	225	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	692	605	0	0	415	194	612	0	225	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	692	605	0	0	415	194	612	0	225	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	692	605	0	0	415	194	612	0	225	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	2.00	1.00	1.46	0.00	0.54	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	3200	1600	2340	0	860	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.24	0.19	0.00	0.00	0.13	0.12	0.26	0.00	0.26	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 SR 91 EB Ramps & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.558
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Street Name:	SR 91 EB Ramps						Albertoni St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	2 0	2 0	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	0	281	0	269	284	331	0	0	500	89
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	281	0	269	284	331	0	0	500	89
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	281	0	269	284	331	0	0	500	89
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	281	0	269	284	331	0	0	500	89
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	281	0	269	284	331	0	0	500	89
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.70	0.30
Final Sat.:	0	0	0	1600	0	1600	2880	3200	0	0	2716	484
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.18	0.00	0.17	0.10	0.10	0.00	0.00	0.18	0.18
Crit Moves:				****			****				****	

Intersection Level Of Service Report
Intersection 29: Main Street & Broadway

Control Type:	Two-way stop	Delay (sec / veh):	19.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.708

Intersection Setup

Name	Main Street		Main Street		Broadway	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Main Street		Main Street		Broadway	
Base Volume Input [veh/h]	272	746	735	5	0	186
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	272	746	735	5	0	186
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	68	187	184	1	0	47
Total Analysis Volume [veh/h]	272	746	735	5	0	186
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.71	0.83	0.45	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	19.42	11.85	7.87	0.00	0.00	0.00
Movement LOS	C	B	A	A		A
95th-Percentile Queue Length [veh]	1.57	2.07	0.87	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	39.13	51.85	21.83	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	13.88		7.81		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	10.24					
Intersection LOS	C					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #30 New Intersection & MLK Jr Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.401
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	0 0	0	0	1 0 1	1	0 1	0 0
Volume Module:												
Base Vol:	183	0	29	0	0	0	0	191	260	38	254	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	183	0	29	0	0	0	0	191	260	38	254	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	183	0	29	0	0	0	0	191	260	38	254	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	183	0	29	0	0	0	0	191	260	38	254	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	183	0	29	0	0	0	0	191	260	38	254	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	1600	1600	1600	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.11	0.00	0.02	0.00	0.00	0.00	0.00	0.12	0.16	0.02	0.16	0.00
Crit Moves:	****								****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #31 Avalon Blvd & New Driveway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.435
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0 0	2	1 0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	90	1437	0	0	958	51	31	0	57	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	1437	0	0	958	51	31	0	57	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	1437	0	0	958	51	31	0	57	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	1437	0	0	958	51	31	0	57	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	1437	0	0	958	51	31	0	57	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	2.85	0.15	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	4800	0	0	4557	243	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.30	0.00	0.00	0.21	0.21	0.02	0.00	0.04	0.00	0.00	0.00
Crit Moves:		****		****					****			

Future with Project Conditions
(City of Carson) 2020
Afternoon Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Main St & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.889
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	95	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0 1	0	1	0 2	0 0	0	0 0	0 1	1	0 1!	0 0
Volume Module:												
Base Vol:	2	543	320	489	693	0	0	0	3	182	0	341
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	543	320	489	693	0	0	0	3	182	0	341
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	543	320	489	693	0	0	0	3	182	0	341
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	543	320	489	693	0	0	0	3	182	0	341
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	543	320	489	693	0	0	0	3	182	0	341
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	1.25	0.74	1.00	2.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	7	2009	1184	1600	3200	0	0	0	1600	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.27	0.27	0.31	0.22	0.00	0.00	0.00	0.00	0.11	0.00	0.21
Crit Moves:		****		****			****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Main St & 1-405 NB off

Cycle (sec):	100	Critical Vol./Cap.(X):	0.742
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	0 1	0 1	0
Volume Module:												
Base Vol:	21	742	0	0	1361	93	0	0	0	102	122	279
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	742	0	0	1361	93	0	0	0	102	122	279
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	21	742	0	0	1361	93	0	0	0	102	122	279
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	21	742	0	0	1361	93	0	0	0	102	122	279
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	21	742	0	0	1361	93	0	0	0	102	122	279
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.87	0.13	0.00	0.00	0.00	0.41	0.59	1.00
Final Sat.:	1600	3200	0	0	2995	205	0	0	0	649	951	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.23	0.00	0.00	0.45	0.45	0.00	0.00	0.00	0.06	0.13	0.17
Crit Moves:	****				****							****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Main St & I-405 SB On-Ramp

Cycle (sec):	100	Critical Vol./Cap.(X):	0.767
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	1 0	0 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	706	150	318	1145	0	62	279	42	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	706	150	318	1145	0	62	279	42	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	706	150	318	1145	0	62	279	42	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	706	150	318	1145	0	62	279	42	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	706	150	318	1145	0	62	279	42	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.65	0.35	1.00	2.00	0.00	1.00	0.87	0.13	0.00	0.00	0.00
Final Sat.:	0	2639	561	1600	3200	0	1600	1391	209	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.27	0.27	0.20	0.36	0.00	0.04	0.20	0.20	0.00	0.00	0.00
Crit Moves:		****		****				****				

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Main St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.024
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	35	496	417	154	875	188	232	1418	103	361	1010	117
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	35	496	417	154	875	188	232	1418	103	361	1010	117
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	35	496	417	154	875	188	232	1418	103	361	1010	117
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	496	417	154	875	188	232	1418	103	361	1010	117
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	35	496	417	154	875	188	232	1418	103	361	1010	117
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.09	0.91	1.00	1.65	0.35	1.00	2.80	0.20	1.00	2.69	0.31
Final Sat.:	1600	1738	1462	1600	2634	566	1600	4475	325	1600	4302	498
Capacity Analysis Module:												
Vol/Sat:	0.02	0.29	0.29	0.10	0.33	0.33	0.15	0.32	0.32	0.23	0.23	0.23
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Main St & Torrance Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.789
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	64	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1 1	0	1 0	2 0	1	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	191	481	11	38	893	367	442	58	488	6	17	27
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	191	481	11	38	893	367	442	58	488	6	17	27
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	191	481	11	38	893	367	442	58	488	6	17	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	191	481	11	38	893	367	442	58	488	6	17	27
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	191	481	11	38	893	367	442	58	488	6	17	27
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.96	0.04	1.00	2.00	1.00	0.88	0.12	1.00	0.12	0.34	0.54
Final Sat.:	2880	3128	72	1600	3200	1600	1414	186	1600	192	544	864
Capacity Analysis Module:												
Vol/Sat:	0.07	0.15	0.15	0.02	0.28	0.23	0.31	0.31	0.31	0.03	0.03	0.03
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Avalon Blvd & Artesia Blvd/SR 90

Cycle (sec):	100	Critical Vol./Cap.(X):	0.605
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	1272	245	165	1175	0	0	0	0	425	0	453
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1272	245	165	1175	0	0	0	0	425	0	453
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1272	245	165	1175	0	0	0	0	425	0	453
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1272	245	165	1175	0	0	0	0	425	0	453
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1272	245	165	1175	0	0	0	0	425	0	453
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.45	0.01	1.54
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	2323	0	2477
Capacity Analysis Module:												
Vol/Sat:	0.00	0.27	0.15	0.06	0.24	0.00	0.00	0.00	0.00	0.18	0.00	0.18
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Avalon Blvd & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.917
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	109	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	1 0	1 1	1	1 0	1 1	1
Volume Module:												
Base Vol:	245	1012	211	264	1072	266	290	805	592	151	21	191
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	245	1012	211	264	1072	266	290	805	592	151	21	191
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	245	1012	211	264	1072	266	290	805	592	151	21	191
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	245	1012	211	264	1072	266	290	805	592	151	21	191
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	245	1012	211	264	1072	266	290	805	592	151	21	191
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.40	0.60	1.00	1.73	1.27	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3846	954	1600	2766	2034	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.15	0.21	0.13	0.17	0.28	0.28	0.18	0.29	0.29	0.09	0.01	0.06
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Avalon Blvd & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.814
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	70	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	157	1005	257	431	1209	86	115	668	159	220	719	357
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	157	1005	257	431	1209	86	115	668	159	220	719	357
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	157	1005	257	431	1209	86	115	668	159	220	719	357
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	157	1005	257	431	1209	86	115	668	159	220	719	357
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	157	1005	257	431	1209	86	115	668	159	220	719	357
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.80	0.20	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	4481	319	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.21	0.16	0.15	0.27	0.27	0.07	0.21	0.10	0.14	0.22	0.22
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Avalon Blvd & 184th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.528
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	0 0	1! 0	0	1 0	1! 0	1
Volume Module:												
Base Vol:	34	1295	39	56	1506	33	74	0	30	51	0	48
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	34	1295	39	56	1506	33	74	0	30	51	0	48
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	34	1295	39	56	1506	33	74	0	30	51	0	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	34	1295	39	56	1506	33	74	0	30	51	0	48
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	34	1295	39	56	1506	33	74	0	30	51	0	48
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.94	0.06	0.71	0.00	0.29	1.55	0.00	1.45
Final Sat.:	1600	4800	1600	1600	4697	103	1138	0	462	2473	0	2327
Capacity Analysis Module:												
Vol/Sat:	0.02	0.27	0.02	0.04	0.32	0.32	0.06	0.00	0.07	0.02	0.00	0.02
Crit Moves:	****				****				****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Avalon Blvd & University Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.781
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0	1 0	0 0	1
Volume Module:												
Base Vol:	0	1175	356	355	1310	0	0	0	0	501	0	235
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1175	356	355	1310	0	0	0	0	501	0	235
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1175	356	355	1310	0	0	0	0	501	0	235
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1175	356	355	1310	0	0	0	0	501	0	235
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1175	356	355	1310	0	0	0	0	501	0	235
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.24	0.22	0.12	0.27	0.00	0.00	0.00	0.00	0.31	0.00	0.15
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Avalon Blvd & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.694
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2 1	0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	111	1279	0	0	1688	121	237	0	200	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	111	1279	0	0	1688	121	237	0	200	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	111	1279	0	0	1688	121	237	0	200	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	111	1279	0	0	1688	121	237	0	200	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	111	1279	0	0	1688	121	237	0	200	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.80	0.20	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4479	321	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.27	0.00	0.00	0.38	0.38	0.15	0.00	0.13	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Avalon Blvd & Elsmere Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.546
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	38	1334	73	61	1761	64	30	0	18	35	1	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	38	1334	73	61	1761	64	30	0	18	35	1	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	38	1334	73	61	1761	64	30	0	18	35	1	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	38	1334	73	61	1761	64	30	0	18	35	1	36
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	38	1334	73	61	1761	64	30	0	18	35	1	36
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.84	0.16	1.00	2.89	0.11	1.00	0.00	1.00	1.00	0.03	0.97
Final Sat.:	1600	4551	249	1600	4632	168	1600	0	1600	1600	43	1557
Capacity Analysis Module:												
Vol/Sat:	0.02	0.29	0.29	0.04	0.38	0.38	0.02	0.00	0.01	0.02	0.02	0.02
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Avalon Blvd & Turmont St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.676
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	1 0	3 0	1	1 0	1 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	222	1385	195	104	1735	92	64	14	135	85	16	61
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	222	1385	195	104	1735	92	64	14	135	85	16	61
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	222	1385	195	104	1735	92	64	14	135	85	16	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	222	1385	195	104	1735	92	64	14	135	85	16	61
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	222	1385	195	104	1735	92	64	14	135	85	16	61
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.63	0.37	1.00	3.00	1.00	1.00	1.00	1.00	1.00	0.21	0.79
Final Sat.:	2880	4208	592	1600	4800	1600	1600	1600	1600	1600	332	1268
Capacity Analysis Module:												
Vol/Sat:	0.08	0.33	0.33	0.07	0.36	0.06	0.04	0.01	0.08	0.05	0.05	0.05
Crit Moves:	****				****				****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Avalon Blvd & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.008
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	172	1179	181	333	1131	429	348	1008	245	256	658	193
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	172	1179	181	333	1131	429	348	1008	245	256	658	193
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	172	1179	181	333	1131	429	348	1008	245	256	658	193
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	172	1179	181	333	1131	429	348	1008	245	256	658	193
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	172	1179	181	333	1131	429	348	1008	245	256	658	193
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.18	0.82	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	3480	1320	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.25	0.11	0.12	0.33	0.33	0.22	0.32	0.15	0.16	0.21	0.12
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Avalon Blvd & I-405 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.598
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 1	0 0	1
Volume Module:												
Base Vol:	348	1210	0	0	1529	539	0	0	0	186	2	517
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	348	1210	0	0	1529	539	0	0	0	186	2	517
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	348	1210	0	0	1529	0	0	0	0	186	2	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	348	1210	0	0	1529	0	0	0	0	186	2	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	348	1210	0	0	1529	0	0	0	0	186	2	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.98	0.02	1.00
Final Sat.:	2880	3200	0	0	4800	1600	0	0	0	3166	34	1600
Capacity Analysis Module:												
Vol/Sat:	0.12	0.38	0.00	0.00	0.32	0.00	0.00	0.00	0.00	0.06	0.06	0.00
Crit Moves:	****				****					****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avalon Blvd & I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.646
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	2	0 1	2 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	53	1172	186	0	1183	537	350	226	457	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	53	1172	186	0	1183	537	350	226	457	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	53	1172	186	0	1183	537	350	226	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	53	1172	186	0	1183	537	350	226	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	53	1172	186	0	1183	537	350	226	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.73	0.27	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2762	438	0	3200	1600	2880	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.42	0.42	0.00	0.37	0.34	0.12	0.07	0.00	0.00	0.00	0.00
Crit Moves:		****		****			****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 Main St & SR 91 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.624
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	1	644	158	109	802	0	0	0	0	259	0	329
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	644	158	109	802	0	0	0	0	259	0	329
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	644	158	109	802	0	0	0	0	259	0	329
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	644	158	109	802	0	0	0	0	259	0	329
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	1	644	158	109	802	0	0	0	0	259	0	329
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.61	0.39	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	2570	630	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.25	0.07	0.25	0.00	0.00	0.00	0.00	0.16	0.00	0.21
Crit Moves:		****		****								****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.934
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	121	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	110	500	154	225	684	172	59	654	151	177	249	238
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	500	154	225	684	172	59	654	151	177	249	238
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	500	154	225	684	172	59	654	151	177	249	238
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	500	154	225	684	172	59	654	151	177	249	238
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	110	500	154	225	684	172	59	654	151	177	249	238
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.53	0.47	1.00	1.60	0.40	1.00	1.62	0.38	1.00	1.02	0.98
Final Sat.:	1600	2446	754	1600	2557	643	1600	2600	600	1600	1636	1564
Capacity Analysis Module:												
Vol/Sat:	0.07	0.20	0.20	0.14	0.27	0.27	0.04	0.25	0.25	0.11	0.15	0.15
Crit Moves:	****					****		****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Main St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.940
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	125	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	191	453	163	165	734	87	82	1014	216	128	644	137
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	191	453	163	165	734	87	82	1014	216	128	644	137
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	191	453	163	165	734	87	82	1014	216	128	644	137
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	191	453	163	165	734	87	82	1014	216	128	644	137
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	191	453	163	165	734	87	82	1014	216	128	644	137
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.79	0.21	1.00	1.65	0.35	1.00	1.65	0.35
Final Sat.:	1600	3200	1600	1600	2861	339	1600	2638	562	1600	2639	561
Capacity Analysis Module:												
Vol/Sat:	0.12	0.14	0.10	0.10	0.26	0.26	0.05	0.38	0.38	0.08	0.24	0.24
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 Figueroa St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.754
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2 0	1	1 0	2 0	1	1 0	1	1 0
Volume Module:												
Base Vol:	106	505	145	75	722	108	115	1026	221	68	841	88
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	106	505	145	75	722	108	115	1026	221	68	841	88
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	106	505	145	75	722	108	115	1026	221	68	841	88
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	106	505	145	75	722	108	115	1026	221	68	841	88
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	106	505	145	75	722	108	115	1026	221	68	841	88
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.55	0.45	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.81	0.19
Final Sat.:	1600	2486	714	1600	3200	1600	1600	3200	1600	1600	2897	303
Capacity Analysis Module:												
Vol/Sat:	0.07	0.20	0.20	0.05	0.23	0.07	0.07	0.32	0.14	0.04	0.29	0.29
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 I-110 NB On-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.529
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	2	0	1	1	0	1	0	2	0	1
Volume Module:												
Base Vol:	0	0	0	0	0	0	459	1373	0	0	762	337
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	459	1373	0	0	762	337
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	459	1373	0	0	762	337
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	459	1373	0	0	762	337
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	459	1373	0	0	762	337
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	1600	0	0	0	0	3200	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.43	0.00	0.00	0.24	0.21
Crit Moves:								****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 I-110 SB Off-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.845
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	79	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	0 0	2 0	0	0 0	3 0	0
Volume Module:												
Base Vol:	0	0	0	397	0	471	0	1443	0	0	756	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	397	0	471	0	1443	0	0	756	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	397	0	471	0	1443	0	0	756	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	397	0	471	0	1443	0	0	756	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	397	0	471	0	1443	0	0	756	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.25	0.00	0.29	0.00	0.45	0.00	0.00	0.16	0.00
Crit Moves:						****		****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 Central Ave & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.764
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	59	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	2 0	2 0	1	2 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	153	538	35	176	662	339	509	720	217	18	377	213
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	153	538	35	176	662	339	509	720	217	18	377	213
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	153	538	35	176	662	339	509	720	217	18	377	213
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	153	538	35	176	662	339	509	720	217	18	377	213
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	153	538	35	176	662	339	509	720	217	18	377	213
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.54	0.46	1.00	1.28	0.72
Final Sat.:	1600	3200	1600	2880	3200	1600	2880	2459	741	1600	2045	1155
Capacity Analysis Module:												
Vol/Sat:	0.10	0.17	0.02	0.06	0.21	0.21	0.18	0.29	0.29	0.01	0.18	0.18
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 Hamilton Ave & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.956
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	139	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	24	34	283	295	318	63	13	647	199	369	506	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	24	34	283	295	318	63	13	647	199	369	506	98
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	24	34	283	295	318	63	13	647	199	369	506	98
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	34	283	295	318	63	13	647	199	369	506	98
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	24	34	283	295	318	63	13	647	199	369	506	98
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.67	0.33	1.00	1.53	0.47	1.00	1.68	0.32
Final Sat.:	1600	1600	1600	1600	2671	529	1600	2447	753	1600	2681	519
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.18	0.18	0.12	0.12	0.01	0.26	0.26	0.23	0.19	0.19
Crit Moves:			****	****				****		****		

Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	All-way stop	Delay (sec / veh):	136.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.629

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	62	539	739	171	334	261
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	62	539	739	171	334	261
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	135	185	43	84	65
Total Analysis Volume [veh/h]	62	539	739	171	334	261
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	474	539	739	484	439	503
Degree of Utilization, x	0.13	1.03	1.63	0.35	0.68	0.59

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.45	15.33	42.23	1.57	4.93	3.79
95th-Percentile Queue Length [ft]	11.20	383.35	1055.76	39.37	123.31	94.64
Approach Delay [s/veh]	67.67		256.78		23.08	
Approach LOS	F		F		C	
Intersection Delay [s/veh]	136.79					
Intersection LOS	F					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 Figueroa St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.061
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	64	411	413	187	700	208	69	1041	133	350	698	88
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	64	411	413	187	700	208	69	1041	133	350	698	88
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	64	411	413	187	700	208	69	1041	133	350	698	88
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	64	411	413	187	700	208	69	1041	133	350	698	88
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	64	411	413	187	700	208	69	1041	133	350	698	88
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.77	0.23	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	2837	363	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.26	0.12	0.22	0.13	0.04	0.37	0.37	0.22	0.22	0.06
Crit Moves:			****	****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 Figueroa St & I-110 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.745
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	2 0	1	1 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	508	424	0	0	897	303	464	0	139	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	508	424	0	0	897	303	464	0	139	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	508	424	0	0	897	303	464	0	139	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	508	424	0	0	897	303	464	0	139	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	508	424	0	0	897	303	464	0	139	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	2.00	1.00	1.54	0.00	0.46	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	3200	1600	2462	0	738	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.18	0.13	0.00	0.00	0.28	0.19	0.19	0.00	0.19	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 SR 91 EB Ramps & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.626
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Street Name:	SR 91 EB Ramps						Albertoni St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	2 0	2 0	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	0	430	0	366	231	823	0	0	356	63
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	430	0	366	231	823	0	0	356	63
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	430	0	366	231	823	0	0	356	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	430	0	366	231	823	0	0	356	63
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	430	0	366	231	823	0	0	356	63
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.70	0.30
Final Sat.:	0	0	0	1600	0	1600	2880	3200	0	0	2719	481
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.27	0.00	0.23	0.08	0.26	0.00	0.00	0.13	0.13
Crit Moves:				****				****		****		

Intersection Level Of Service Report
Intersection 29: Main Street & Broadway

Control Type:	Two-way stop	Delay (sec / veh):	20.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.631

Intersection Setup

Name	Main Street		Main Street		Broadway	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Main Street		Main Street		Broadway	
Base Volume Input [veh/h]	217	787	804	18	0	495
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	217	787	804	18	0	495
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	54	197	201	5	0	124
Total Analysis Volume [veh/h]	217	787	804	18	0	495
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.63	0.88	0.50	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	20.23	12.13	7.95	0.00	0.00	0.00
Movement LOS	C	B	A	A		A
95th-Percentile Queue Length [veh]	1.32	2.27	0.98	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	33.11	56.69	24.53	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	13.88		7.77		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	8.76					
Intersection LOS	C					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #30 New Intersection & MLK Jr Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.623
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	0 0	0	0	1 0 1	1	0 1	0 0
Volume Module:												
Base Vol:	352	0	55	0	0	0	0	432	350	53	180	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	352	0	55	0	0	0	0	432	350	53	180	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	352	0	55	0	0	0	0	432	350	53	180	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	352	0	55	0	0	0	0	432	350	53	180	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	352	0	55	0	0	0	0	432	350	53	180	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	1600	1600	1600	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.22	0.00	0.03	0.00	0.00	0.00	0.00	0.27	0.22	0.03	0.11	0.00
Crit Moves:	****							****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #31 Avalon Blvd & New Driveway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.636
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0	0 2	1 0	1 0	0 0	1	0	0 0	0 0
Volume Module:												
Base Vol:	161	1365	0	0	1761	83	84	0	163	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	161	1365	0	0	1761	83	84	0	163	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	161	1365	0	0	1761	83	84	0	163	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	161	1365	0	0	1761	83	84	0	163	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	161	1365	0	0	1761	83	84	0	163	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	2.86	0.14	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	4800	0	0	4584	216	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.28	0.00	0.00	0.38	0.38	0.05	0.00	0.10	0.00	0.00	0.00
Crit Moves:	****				****				****			

Future with Project Conditions
(City of Carson) 2020
Saturday Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Main St & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.822
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	72	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	1 0	1 0	2	0 0	0 0	1!	0 0	1 0	1!	0 0
Volume Module:												
Base Vol:	0	303	240	449	314	0	0	0	0	198	0	435
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	303	240	449	314	0	0	0	0	198	0	435
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	303	240	449	314	0	0	0	0	198	0	435
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	303	240	449	314	0	0	0	0	198	0	435
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	303	240	449	314	0	0	0	0	198	0	435
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.12	0.88	1.00	2.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Final Sat.:	0	1786	1414	1600	3200	0	0	1600	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.17	0.28	0.10	0.00	0.00	0.00	0.00	0.12	0.00	0.27
Crit Moves:		****		****								****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Main St & 1-405 NB off

Cycle (sec):	100	Critical Vol./Cap.(X):	0.474
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	0 1	0 1	0
Volume Module:												
Base Vol:	14	435	0	0	611	26	0	0	0	259	93	179
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	14	435	0	0	611	26	0	0	0	259	93	179
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	14	435	0	0	611	26	0	0	0	259	93	179
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	435	0	0	611	26	0	0	0	259	93	179
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	14	435	0	0	611	26	0	0	0	259	93	179
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.92	0.08	0.00	0.00	0.00	0.98	0.35	0.67
Final Sat.:	1600	3200	0	0	3069	131	0	0	0	1561	560	1079
Capacity Analysis Module:												
Vol/Sat:	0.01	0.14	0.00	0.00	0.20	0.20	0.00	0.00	0.00	0.16	0.17	0.17
Crit Moves:	****				****						****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Main St & I-405 SB On-Ramp

Cycle (sec):	100	Critical Vol./Cap.(X):	0.477
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	1 0	0 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	438	248	167	702	0	19	78	15	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	438	248	167	702	0	19	78	15	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	438	248	167	702	0	19	78	15	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	438	248	167	702	0	19	78	15	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	438	248	167	702	0	19	78	15	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.28	0.72	1.00	2.00	0.00	1.00	0.84	0.16	0.00	0.00	0.00
Final Sat.:	0	2043	1157	1600	3200	0	1600	1342	258	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.21	0.10	0.22	0.00	0.01	0.06	0.06	0.00	0.00	0.00
Crit Moves:		****		****				****				

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Avalon Blvd & Artesia Blvd/SR 90

Cycle (sec):	100	Critical Vol./Cap.(X):	0.480
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	888	309	114	883	0	0	0	0	471	0	220
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	888	309	114	883	0	0	0	0	471	0	220
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	888	309	114	883	0	0	0	0	471	0	220
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	888	309	114	883	0	0	0	0	471	0	220
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	888	309	114	883	0	0	0	0	471	0	220
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.19	0.19	0.04	0.18	0.00	0.00	0.00	0.00	0.15	0.00	0.14
Crit Moves:			****	****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Avalon Blvd & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.496
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2	1 0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	74	1383	0	0	1340	53	95	0	75	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	74	1383	0	0	1340	53	95	0	75	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	74	1383	0	0	1340	53	95	0	75	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	74	1383	0	0	1340	53	95	0	75	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	74	1383	0	0	1340	53	95	0	75	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.89	0.11	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4617	183	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.29	0.00	0.00	0.29	0.29	0.06	0.00	0.05	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Avalon Blvd & Elsmere Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.590
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	162	1302	53	49	1261	108	83	0	124	41	0	26
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	162	1302	53	49	1261	108	83	0	124	41	0	26
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	162	1302	53	49	1261	108	83	0	124	41	0	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	162	1302	53	49	1261	108	83	0	124	41	0	26
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	162	1302	53	49	1261	108	83	0	124	41	0	26
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.88	0.12	1.00	2.76	0.24	1.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	1600	4612	188	1600	4421	379	1600	0	1600	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.28	0.28	0.03	0.29	0.29	0.05	0.00	0.08	0.03	0.00	0.02
Crit Moves:	****				****				****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Avalon Blvd & Turmont St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.631
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	1 0	3 0	1	1 0	1 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	201	1507	150	39	1447	73	64	19	134	122	18	46
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	201	1507	150	39	1447	73	64	19	134	122	18	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	201	1507	150	39	1447	73	64	19	134	122	18	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	201	1507	150	39	1447	73	64	19	134	122	18	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	201	1507	150	39	1447	73	64	19	134	122	18	46
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.73	0.27	1.00	3.00	1.00	1.00	1.00	1.00	1.00	0.28	0.72
Final Sat.:	2880	4365	435	1600	4800	1600	1600	1600	1600	1600	450	1150
Capacity Analysis Module:												
Vol/Sat:	0.07	0.35	0.35	0.02	0.30	0.05	0.04	0.01	0.08	0.08	0.04	0.04
Crit Moves:	****				****				****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Avalon Blvd & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.047
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	329	1117	162	307	1011	428	474	502	270	241	464	195
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	329	1117	162	307	1011	428	474	502	270	241	464	195
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	329	1117	162	307	1011	428	474	502	270	241	464	195
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	329	1117	162	307	1011	428	474	502	270	241	464	195
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	329	1117	162	307	1011	428	474	502	270	241	464	195
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.11	0.89	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	3372	1428	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.21	0.23	0.10	0.11	0.30	0.30	0.30	0.16	0.17	0.15	0.15	0.12
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Avalon Blvd & I-405 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.725
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 1	0 0	1
Volume Module:												
Base Vol:	529	1561	0	0	1479	714	0	0	0	427	0	648
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	529	1561	0	0	1479	714	0	0	0	427	0	648
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	529	1561	0	0	1479	0	0	0	0	427	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	529	1561	0	0	1479	0	0	0	0	427	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	529	1561	0	0	1479	0	0	0	0	427	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	2880	3200	0	0	4800	1600	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.18	0.49	0.00	0.00	0.31	0.00	0.00	0.00	0.00	0.13	0.00	0.00
Crit Moves:	****				****					****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avalon Blvd & I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	1.117
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	2 0	1	2 0	2 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	278	1196	178	0	1040	841	915	273	683	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	278	1196	178	0	1040	841	915	273	683	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	278	1196	178	0	1040	841	915	273	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	278	1196	178	0	1040	841	915	273	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	278	1196	178	0	1040	841	915	273	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.74	0.26	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2785	415	0	3200	1600	2880	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.17	0.43	0.43	0.00	0.33	0.53	0.32	0.09	0.00	0.00	0.00	0.00
Crit Moves:	****					****	****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 Main St & SR 91 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.359
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	0	326	162	35	351	0	0	0	0	135	0	108
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	326	162	35	351	0	0	0	0	135	0	108
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	326	162	35	351	0	0	0	0	135	0	108
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	326	162	35	351	0	0	0	0	135	0	108
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	326	162	35	351	0	0	0	0	135	0	108
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.34	0.66	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	2138	1062	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.15	0.15	0.02	0.11	0.00	0.00	0.00	0.00	0.08	0.00	0.07
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.599
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	50	366	131	163	401	74	36	315	50	130	185	152
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	366	131	163	401	74	36	315	50	130	185	152
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	366	131	163	401	74	36	315	50	130	185	152
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	366	131	163	401	74	36	315	50	130	185	152
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	366	131	163	401	74	36	315	50	130	185	152
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.47	0.53	1.00	1.69	0.31	1.00	1.73	0.27	1.00	1.10	0.90
Final Sat.:	1600	2357	843	1600	2701	499	1600	2762	438	1600	1757	1443
Capacity Analysis Module:												
Vol/Sat:	0.03	0.16	0.16	0.10	0.15	0.15	0.02	0.11	0.11	0.08	0.11	0.11
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 I-110 NB On-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.419
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	2	0	1	1	0	1	0	2	0	1
Volume Module:												
Base Vol:	0	0	0	0	0	0	384	877	0	4	545	318
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	384	877	0	4	545	318
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	384	877	0	4	545	318
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	384	877	0	4	545	318
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	384	877	0	4	545	318
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	1600	0	0	0	0	3200	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.27	0.00	0.00	0.17	0.20
Crit Moves:							****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 I-110 SB Off-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.649
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	0 0	2 0	0	0 0	3 0	0
Volume Module:												
Base Vol:	0	0	0	356	0	364	0	1028	0	0	585	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	356	0	364	0	1028	0	0	585	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	356	0	364	0	1028	0	0	585	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	356	0	364	0	1028	0	0	585	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	356	0	364	0	1028	0	0	585	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.22	0.00	0.23	0.00	0.32	0.00	0.00	0.12	0.00
Crit Moves:						****		****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 SR 91 EB Ramps & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.446
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Street Name:	SR 91 EB Ramps						Albertoni St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	2 0	2 0	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	0	209	0	195	295	275	0	0	294	68
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	209	0	195	295	275	0	0	294	68
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	209	0	195	295	275	0	0	294	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	209	0	195	295	275	0	0	294	68
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	209	0	195	295	275	0	0	294	68
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.62	0.38
Final Sat.:	0	0	0	1600	0	1600	2880	3200	0	0	2599	601
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.12	0.10	0.09	0.00	0.00	0.11	0.11
Crit Moves:				****			****				****	

Appendix E

City of Carson Traffic Analysis

Appendix E
City of Carson Traffic Analysis

Although Los Angeles County Department of Public Works (LACDPW) is the lead agency for the Project, a number of the intersections in the Study Area are within the jurisdiction of the City of Carson (City). The analysis presented in the Traffic Study is based on the LACDPW methodologies and guidelines for traffic impact studies. The analysis in this Appendix, presented for informational purposes, is based on the methodology employed by the City.

TRAFFIC ANALYSIS METHODOLOGY

Study Scope and Analysis Conditions

The same study area of 29 existing and two future intersections was analyzed. The base data utilized, including the existing intersection configurations and traffic volumes, are shared with the LACDPW analysis and provided in Traffic Study Appendices B and C. The weekday analysis is based on the full study area, while the Saturday analysis is a focused study of 17 intersections that were selected based on proximity and access to the Project site.

The primary difference between the City and LACDPW analysis methodologies is in the application of background traffic growth and the resulting intersection level of service (LOS) analysis. Specifically, the City allows an increase in background traffic volumes due to an annual ambient growth rate and the traffic anticipated from identified cumulative projects. Therefore, the City methodology also examines the effects of the Project based on Future without and Future with Project Conditions. As a result, the following scenarios were analyzed under the City methodology:

- Existing Conditions (Year 2018) – The analysis of existing traffic conditions provides a basis for the assessment of future traffic conditions; the Existing Conditions represent conditions as of the issuance of the Project's Initial Study.

- Existing with Project Conditions (Year 2018) – This analysis condition projects the potential intersection operating conditions that could be expected if the Project were built under existing conditions. This analysis evaluates the potential Project-related traffic impacts as compared to existing conditions.

- Future Conditions (Year 2020) – This analysis projects the potential intersection operating conditions that could be expected with the addition of ambient growth and traffic from cumulative background projects to the Existing Conditions. This analysis represents the potential future baseline conditions prior to development of the Project; effectively, the effects of cumulative background development.

- Future with Project Conditions (Year 2020) – This analysis projects the potential intersection operating conditions that could be expected with the addition of Project traffic to the Future Conditions. This analysis identifies the potential incremental impacts of the Project within the study area.

Intersection Analysis Methodology

Per City guidelines, Intersection Capacity Utilization (ICU) methodology from *Highway Capacity Manual, Special Report 209* (Transportation Research Board, 2000) was utilized to obtain the volume-to-capacity (V/C) ratio for signalized intersections. As in the Traffic Study, unsignalized intersections were analyzed using the *Highway Capacity Manual, 6th Edition* (Transportation Research Board, 2016) (HCM) methodology with a signal warrant analysis and delay analysis using. Traffix software was used to calculate the V/C ratio for signalized intersections and Vistro software was used to analyze the HCM delay for unsignalized intersections. LOS worksheets for each scenario are provided in the Attachment.

Impact Criteria and Significance Thresholds

The significance of the potential impacts of Project generated traffic at the signalized study intersections was determined using criteria identified by the City, which indicate that a project is considered to have a significant traffic impact on a signalized intersection if the increase in the V/C ratio attributable to the project exceeds the specified threshold based on the final intersection LOS:

Intersection Conditions with Project Traffic		Significant Impact Threshold for Project-related Increase in V/C Ratio
LOS	V/C	
E, F	> 0.900	Equal to or greater than 0.02

Source: City of Carson.

The relative impact of the Project-added traffic volumes was evaluated based on analysis of existing and future operating conditions at the study intersections, with and without the Project. Using these criteria, for example, a project would not have a significant impact at an intersection if it is operating at LOS D after the addition of project traffic. If the intersection, however, is operating at LOS F after the addition of project traffic and the incremental change in the V/C ratio is 0.020 or greater, the project would be considered to have a significant impact. LOS D is the minimum acceptable operation of an intersection.

Although the City does not identify a significance threshold for unsignalized intersections, the Traffic Study conservatively assumed that meeting a signal warrant constitutes a significant impact.

PROJECT TRIP GENERATION ESTIMATE AND ASSIGNMENT

Both the development and assignment of the Project trip generation estimates through the 31 analyzed intersections are detailed in Chapter 3 of the Traffic Study. As summarized, the Project is estimated to generate 3,814 net new weekday trips, including 190 net new morning peak hour trips and 437 net new afternoon peak hour trips. On Saturday, a total of 6,601 net new daily trips are anticipated, including 794 net new mid-day peak hour trips.

TRAFFIC VOLUME DEVELOPMENT

Existing Traffic Volumes

The existing traffic volumes described in Chapter 2 of the Traffic Study were used as the basis for the development of the future conditions traffic volumes.

Ambient Traffic Growth

Existing traffic is expected to increase as a result of regional growth and development outside the Study Area. In order to main consistency with recently completed traffic studies within the Study Area, such as *The District at South Bay Transportation Impact Analysis* (Fehr & Peers, September 2017), an ambient growth rate of 0.5% per year was applied to reflect areawide growth. Based on the existing year of 2018 and projected build-out year of 2020, the total adjustment applied over the two-year period was 1.0%.

Cumulative Projects

The development and assignment of cumulative project trip generation estimates through the analyzed intersections are detailed in Chapter 5 of the Traffic Study. A total of 37,703 daily trips are anticipated, including 1,843 morning peak hour and 3,162 afternoon peak hour trips. On Saturday, approximately 3,818 mid-day peak hour trips are estimated. The geographic assignment of the cumulative projects traffic is based on several factors, including the type and density of the proposed land uses, the geographic distribution of the population from which the employees/residents and potential patrons of the proposed developments are drawn, and the location of these projects in relation to the surrounding street system.

The combination of the existing traffic volumes, ambient traffic growth, and traffic from cumulative projects form the Future Conditions without Project traffic volumes. This scenario was used as the condition to evaluate potential impacts from the addition of Project traffic.

INTERSECTION LOS

Existing Conditions (Year 2018)

During the weekday morning and afternoon peak periods, 28 of the 29 existing intersections operate at LOS D or better during both peak periods. The unsignalized intersection of Hamilton Avenue & I-110 Southbound Ramps (Intersection #25) operates at LOS E and LOS F during the morning and afternoon peak hour, respectively. The unsignalized intersection of Hamilton Avenue & I-110

Southbound Ramps (Intersection #25) met signal warrants under Existing conditions.

On Saturday, all 15 existing intersections operate at LOS A or B or better during the mid-day peak period.

Existing with Project Conditions (Year 2018)

The addition of Project traffic to the existing conditions results in the analysis of all 31 intersections. During the weekday morning and afternoon peak periods, 27 of the 29 existing intersections operate at LOS D or better during both peak periods. The intersections of Avalon Boulevard & Del Amo Boulevard (Intersection #14) and Hamilton Avenue & I-110 Southbound Ramps (Intersection #25) are projected to operate at LOS E and LOS F during either or both peak hours. The unsignalized intersection of Hamilton Avenue & I-110 Southbound Ramps (Intersection #25) met signal warrants under Existing with Project Conditions.

A total of 17 intersections are analyzed with the addition of Project traffic during the Saturday mid-day peak hour. All 17 are projected to operate at LOS A or B better during the mid-day peak period.

Future Conditions (Year 2020)

During the future conditions weekday morning and afternoon peak periods, 24 of the 29 existing intersections are projected to operate at LOS D or better during both peak periods; on Saturday, 13 of the 15 existing intersections are projected to operate at LOS A or B during the mid-day peak period. The following intersections are projected to operate at LOS E or LOS F during the weekday or Saturday peak hours:

4. Main Street & Del Amo Boulevard (afternoon peak hour)
14. Avalon Boulevard & Del Amo Boulevard (weekday morning and afternoon and Saturday mid-day peak hours)
16. Avalon Boulevard & I-405 Southbound Ramps (Saturday mid-day peak hour)
24. Hamilton Avenue & Del Amo Boulevard (afternoon peak hour)

25. Hamilton Avenue & I-110 Southbound ramps (morning and afternoon peak hour)
26. Figueroa Street & I-110 Northbound ramps (afternoon peak hour)

The unsignalized intersection of Hamilton Avenue & I-110 Southbound Ramps (Intersection #25) met signal warrants under Future without Project conditions.

Future with Project Conditions (Year 2020)

With the addition of Project traffic, 23 intersections are projected to operate at LOS D or better during both weekday peak periods and 15 intersections are projected to operate at LOS D or better during the Saturday mid-day peak hour. The following intersections are projected to operate at LOS E or LOS F during the weekday or Saturday peak hours:

4. Main Street & Del Amo Boulevard (afternoon peak hour)
7. Avalon Boulevard & Albertoni Street (afternoon peak hour)
14. Avalon Boulevard & Del Amo Boulevard (weekday morning and afternoon and Saturday mid-day peak hours)
16. Avalon Boulevard & I-405 Southbound Ramps (Saturday mid-day peak hour)
18. Main Street & Albertoni Street (afternoon peak hour)
19. Main Street & Victoria Street (afternoon peak hour)
24. Hamilton Avenue & Del Amo Boulevard (afternoon peak hour)
25. Hamilton Avenue & I-110 Southbound ramps (morning and afternoon peak hour)
26. Figueroa Street & I-110 Northbound ramps (afternoon peak hour)

Tables E-1A and E-1B summarize the results of the Existing Conditions for the weekday and Saturday peak hours, respectively. Similarly, Tables E-2A and E-2B summarize the results of the Future Conditions analyses.

The unsignalized intersection of Hamilton Avenue & I-110 Southbound Ramps (Intersection #25) met signal warrants under Future with Project Conditions.

IMPACT ANALYSIS

Existing with Project Conditions

None of the 29 signalized intersections would be considered to be significantly impacted on weekdays and none of the 17 analyzed intersections would be considered to be significantly impacted on Saturdays under City criteria. However, the unsignalized intersection of Hamilton Avenue & I-110 Southbound Ramps (Intersection #25) met signal warrants under Existing with Project Conditions and would, therefore, be considered significantly impacted based on the criteria in the Traffic Study.

Future with Project Conditions

Under weekday conditions, three of the 29 signalized intersections would be considered to be significantly impacted under City criteria:

7. Avalon Boulevard & Albertoni Street
18. Main Street & Albertoni Street
19. Main Street & Victoria Street

These are the same intersections that would be impacted under the analysis detailed in Chapter 5 of the Traffic Study.

The unsignalized intersection of Hamilton Avenue & I-110 Southbound Ramps (Intersection #25) met signal warrants under Future with Project Conditions and would, therefore, be considered significantly impacted based on the criteria in the Traffic Study.

While there were no significant impacts identified during Saturday mid-day under the County analysis, the City analysis identified significant impacts at two of the 17 analyzed intersections:

14. Avalon Boulevard & Del Amo Boulevard
16. Avalon Boulevard & I-405 Southbound Ramps

Weekday Impacts

The following mitigation measures for the three intersections projected to be impacted by the Project on weekdays are the same as identified when using the County methodology.

7. Avalon Boulevard & Albertoni Street. The intersection mitigation consists of providing an additional northbound left-turn lane for a total of two northbound left-turn lanes on Avalon Boulevard. This measure could be accommodated by restriping the painted gore/median between the existing northbound left-turn and through lanes.

18. Main Street & Albertoni Street. The intersection mitigation consists of providing an eastbound right-turn lane on Albertoni Street, resulting in an eastbound approach providing one left-turn lane, two through lanes, and one right-turn lane. This measure could be accommodated by restriping the existing 24 foot wide curb lane into a 12 foot wide through lane and 12 foot wide right-turn lane and restricting on-street parking for an additional 40 feet along the south curb of Albertoni Street west of the intersection (for a total of 100 feet with restricted parking).

19. Main Street & Victoria Street. The intersection mitigation consists of providing an eastbound right-turn lane on Victoria Street, resulting in an eastbound approach providing one left-turn lane, two through lanes, and one right-turn lane. This measure could be accommodated by restriping the existing 44 foot wide eastbound approach to provide a total of four 11 foot wide lanes, comprised of one left-turn lane, two through lanes, and one right-turn lane and restricting on-street parking for an additional 50 feet along the south curb of Albertoni Street west of the intersection (for a total of 100 feet with restricted parking).

Saturday Impacts

The following mitigation measures for the two intersections projected to be impacted by the Project on weekends are the same as identified when using the County methodology..

14. Avalon Boulevard & Del Amo Boulevard. The intersection mitigation consists of providing an additional northbound left-turn lane on Avalon Boulevard, resulting in a northbound approach providing two left-turn lanes, three through lanes, and one right-turn lane. This measure could be

accommodated by reconstructing the northbound left-turn pocket to generally mirror the configuration and dimensions of the existing southbound left-turn pocket. This is the same mitigation identified for the intersection when using the County methodology.

16. Avalon Boulevard & I-405 Southbound Ramps. The intersection mitigation consists of operational modifications that result in the addition of a southbound right-turn overlap signal phase and the associated signal equipment upgrades.

TABLE E-1A
EXISTING WITH PROJECT CONDITIONS (YEAR 2018) - WEEKDAY
INTERSECTION PEAK HOUR LEVELS OF SERVICE - CITY OF CARSON METHODOLOGY

No.	Signalized Intersection	Peak Hour	Existing Conditions (Year 2018)		Existing with Project Conditions (Year 2018)			
			V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	Change in V/C Ratio	Impacted with Carson criteria? [a]
1.	Main Street & MLK Jr Street	AM	0.415	A	0.471	A	0.056	NO
		PM	0.524	A	0.617	B	0.093	NO
2.	Main Street & I-405 NB Off-Ramp	AM	0.567	A	0.576	A	0.009	NO
		PM	0.675	B	0.694	B	0.019	NO
3.	Main Street & I-405 SB On-Ramp	AM	0.452	A	0.463	A	0.011	NO
		PM	0.702	C	0.718	C	0.016	NO
4.	Main Street & Del Amo Boulevard	AM	0.665	B	0.679	B	0.014	NO
		PM	0.864	D	0.876	D	0.012	NO
5.	Main Street & Torrance Boulevard	AM	0.622	B	0.626	B	0.004	NO
		PM	0.754	C	0.757	C	0.003	NO
6.	Avalon Boulevard & SR-91 WB On-Ramp	AM	0.546	A	0.547	A	0.001	NO
		PM	0.570	A	0.573	A	0.003	NO
7.	Avalon Boulevard & Albertoni Street	AM	0.647	B	0.649	B	0.002	NO
		PM	0.843	D	0.865	D	0.022	NO
8.	Avalon Boulevard & Victoria Street	AM	0.590	A	0.595	A	0.005	NO
		PM	0.736	C	0.751	C	0.015	NO
9.	Avalon Boulevard & 184th Street-StubHub Center Gate	AM	0.392	A	0.395	A	0.003	NO
		PM	0.469	A	0.484	A	0.015	NO
10.	Avalon Boulevard & University Drive	AM	0.667	B	0.669	B	0.002	NO
		PM	0.723	C	0.731	C	0.008	NO
11.	Avalon Boulevard & MLK Jr Street	AM	0.418	A	0.434	A	0.016	NO
		PM	0.592	A	0.639	B	0.047	NO
12.	Avalon Boulevard & Elsmere Drive	AM	0.459	A	0.461	A	0.002	NO
		PM	0.435	A	0.500	A	0.065	NO
13.	Avalon Boulevard & Turmont Street	AM	0.520	A	0.522	A	0.002	NO
		PM	0.494	A	0.504	A	0.010	NO
14.	Avalon Boulevard & Del Amo Boulevard	AM	0.797	C	0.798	C	0.001	NO
		PM	0.897	D	0.902	E	0.005	NO
15.	Avalon Boulevard & I-405 NB Ramps	AM	0.470	A	0.470	A	0.000	NO
		PM	0.508	A	0.511	A	0.003	NO
16.	Avalon Boulevard & I-405 SB Ramps	AM	0.602	B	0.603	B	0.001	NO
		PM	0.586	A	0.590	A	0.004	NO
17.	Main Street & SR-91 WB Ramps	AM	0.624	B	0.632	B	0.008	NO
		PM	0.581	A	0.592	A	0.011	NO
18.	Main Street & Albertoni Street	AM	0.688	B	0.698	B	0.010	NO
		PM	0.814	D	0.849	D	0.035	NO
19.	Main Street & Victoria Street	AM	0.525	A	0.547	A	0.022	NO
		PM	0.736	C	0.777	C	0.041	NO
20.	Figueroa Street & Victoria Street	AM	0.605	B	0.609	B	0.004	NO
		PM	0.692	B	0.707	C	0.015	NO
21.	I-110 NB On-Ramp & 190th Street	AM	0.353	A	0.358	A	0.005	NO
		PM	0.471	A	0.483	A	0.012	NO
22.	I-110 SB Off-Ramp & 190th Street	AM	0.769	C	0.772	C	0.003	NO
		PM	0.802	D	0.809	D	0.007	NO
23.	Central Avenue & Victoria Street	AM	0.799	C	0.800	C	0.001	NO
		PM	0.736	C	0.739	C	0.003	NO
24.	Hamilton Avenue & Del Amo Blvd	AM	0.546	A	0.547	A	0.001	NO
		PM	0.768	C	0.778	C	0.010	NO
25.	Hamilton Avenue & I-110 SB Ramps	AM	40.0	E	40.6	E	0.6	[c]
		PM	81.8	F	86.7	F	4.9	[c]
26.	Figueroa Street & Del Amo Boulevard	AM	0.730	C	0.733	C	0.003	NO
		PM	0.822	D	0.834	D	0.012	NO
27.	Figueroa Street & I-110 NB Ramps	AM	0.698	B	0.700	B	0.002	NO
		PM	0.705	C	0.711	C	0.006	NO
28.	SR-91 EB Ramps & Albertoni Street	AM	0.551	A	0.552	A	0.001	NO
		PM	0.621	B	0.621	B	0.000	NO
29.	Main Street & Broadway	AM	17.8	C	18.4	C	0.6	NO
		PM	17.1	C	18.0	C	0.9	NO
30.	New Intersection & MLK Jr Street	AM	New Intersection		0.291	A	0.291	N/A
		PM			0.453	A	0.453	N/A
31.	Avalon Boulevard & New Intersection	AM	New Intersection		0.378	A	0.378	N/A
		PM			0.433	A	0.433	N/A

Notes:

The analysis in this able is for informational purposes only and prepared using the City of Carson's analysis methodology and significant impact criteria.

AM - Weekday AM Peak Hour, PM - Weekday PM Peak Hour

[a] Column presents, for informational purposes, potential impacts when applying the City of Carson significant impact criteria.

[b] Unsignalized Intersection. The City of Carson does not provide significance thresholds for unsignalized intersections. However, signal warrants were performed for unsignalized intersections in the Traffic Study.

[c] Signal warrants were met under Existing, Existing with Project, and Future with Project Conditions.

TABLE E-1B
EXISTING WITH PROJECT CONDITIONS (YEAR 2018) - SATURDAY
INTERSECTION PEAK HOUR LEVELS OF SERVICE - CITY OF CARSON METHODOLOGY

No.	Signalized Intersection	Peak Hour	Existing Conditions (Year 2018)		Existing with Project Conditions (Year 2018)			
			V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	Change in V/C Ratio	Significant Impact? [a]
1.	Main Street & MLK Jr Street	MD	0.303	A	0.447	A	0.144	NO
2.	Main Street & I-405 NB Off-Ramp	MD	0.321	A	0.347	A	0.026	NO
3.	Main Street & I-405 SB On-Ramp	MD	0.328	A	0.356	A	0.028	NO
6.	Avalon Boulevard & SR-91 WB On-Ramp	MD	0.424	A	0.448	A	0.024	NO
11.	Avalon Boulevard & MLK Jr Street	MD	0.396	A	0.419	A	0.023	NO
12.	Avalon Boulevard & Elsmere Drive	MD	0.365	A	0.515	A	0.150	NO
13.	Avalon Boulevard & Turmont Street	MD	0.436	A	0.470	A	0.034	NO
14.	Avalon Boulevard & Del Amo Boulevard	MD	0.634	B	0.659	B	0.025	NO
15.	Avalon Boulevard & I-405 NB Ramps	MD	0.528	A	0.543	A	0.015	NO
16.	Avalon Boulevard & I-405 SB Ramps	MD	0.657	B	0.674	B	0.017	NO
17.	Main Street & SR-91 WB Ramps	MD	0.277	A	0.295	A	0.018	NO
18.	Main Street & Albertoni Street	MD	0.424	A	0.464	A	0.040	NO
21.	I-110 NB On-Ramp & 190th Street	MD	0.353	A	0.362	A	0.009	NO
22.	I-110 SB Off-Ramp & 190th Street	MD	0.603	B	0.614	B	0.011	NO
28	SR-91 EB Ramps & Albertoni Street	MD	0.433	A	0.437	A	0.004	NO
30.	New driveway & MLK Jr Street	MD	New Intersection		0.299	A	-	N/A
31.	Avalon Boulevard & New driveway	MD	New Intersection		0.341	A	-	N/A

MD - Saturday Midday Peak Hour
[a] Significance based on City of Carson thresholds

TABLE E-2A
FUTURE WITH PROJECT CONDITIONS (YEAR 2020) - WEEKDAY
INTERSECTION PEAK HOUR LEVELS OF SERVICE - CITY OF CARSON METHODOLOGY

No.	Signalized Intersection	Peak Hour	Future Conditions (Year 2020)		Future with Project Conditions (Year 2020)				Future with Project Conditions (Year 2020) with Mitigation			
			V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	Change in V/C Ratio	Impacted with Carson criteria? [a]	V/C Ratio / Delay	LOS	Change in V/C Ratio	Impacted with Carson criteria? [a]
1.	Main Street & MLK Jr Street	AM	0.581	A	0.641	B	0.060	NO				
		PM	0.791	C	0.889	D	0.098	NO				
2.	Main Street & I-405 NB Off-Ramp	AM	0.590	A	0.600	A	0.010	NO				
		PM	0.723	C	0.742	C	0.019	NO				
3.	Main Street & I-405 SB On-Ramp	AM	0.475	A	0.486	A	0.011	NO				
		PM	0.752	C	0.767	C	0.015	NO				
4.	Main Street & Del Amo Boulevard	AM	0.765	C	0.769	C	0.004	NO				
		PM	1.016	F	1.024	F	0.008	NO				
5.	Main Street & Torrance Boulevard	AM	0.658	B	0.662	B	0.004	NO				
		PM	0.781	C	0.789	C	0.008	NO				
6.	Avalon Boulevard & SR-91 WB On-Ramp	AM	0.572	A	0.573	A	0.001	NO				
		PM	0.602	B	0.605	B	0.003	NO				
7.	Avalon Boulevard & Albertoni Street	AM	0.664	B	0.666	B	0.002	NO	0.666	B	0.002	NO
		PM	0.895	D	0.917	E	0.022	YES	0.861	D	-0.034	NO
8.	Avalon Boulevard & Victoria Street	AM	0.627	B	0.632	B	0.005	NO				
		PM	0.792	C	0.814	D	0.022	NO				
9.	Avalon Boulevard & 184th Street-StubHub Center Gate	AM	0.416	A	0.420	A	0.004	NO				
		PM	0.512	A	0.528	A	0.016	NO				
10.	Avalon Boulevard & University Drive	AM	0.676	B	0.678	B	0.002	NO				
		PM	0.767	C	0.781	C	0.014	NO				
11.	Avalon Boulevard & MLK Jr Street	AM	0.445	A	0.469	A	0.024	NO				
		PM	0.647	B	0.694	B	0.047	NO				
12.	Avalon Boulevard & Elsmere Drive	AM	0.489	A	0.492	A	0.003	NO				
		PM	0.486	A	0.546	A	0.060	NO				
13.	Avalon Boulevard & Turmont Street	AM	0.634	B	0.636	B	0.002	NO				
		PM	0.670	B	0.676	B	0.006	NO				
14.	Avalon Boulevard & Del Amo Boulevard	AM	0.922	E	0.923	E	0.001	NO				
		PM	1.003	F	1.008	F	0.005	NO				
15.	Avalon Boulevard & I-405 NB Ramps	AM	0.514	A	0.515	A	0.001	NO				
		PM	0.595	A	0.598	A	0.003	NO				
16.	Avalon Boulevard & I-405 SB Ramps	AM	0.668	B	0.668	B	0.000	NO				
		PM	0.642	B	0.646	B	0.004	NO				
17.	Main Street & SR-91 WB Ramps	AM	0.654	B	0.662	B	0.008	NO				
		PM	0.613	B	0.624	B	0.011	NO				
18.	Main Street & Albertoni Street	AM	0.726	C	0.729	C	0.003	NO	0.698	B	-0.028	NO
		PM	0.899	D	0.934	E	0.035	YES	0.803	D	-0.096	NO
19.	Main Street & Victoria Street	AM	0.626	B	0.647	B	0.021	NO	0.532	A	-0.094	NO
		PM	0.899	D	0.940	E	0.041	YES	0.747	C	-0.152	NO
20.	Figueroa Street & Victoria Street	AM	0.637	B	0.641	B	0.004	NO				
		PM	0.745	C	0.754	C	0.009	NO				
21.	I-110 NB On-Ramp & 190th Street	AM	0.385	A	0.390	A	0.005	NO				
		PM	0.518	A	0.529	A	0.011	NO				
22.	I-110 SB Off-Ramp & 190th Street	AM	0.805	D	0.808	D	0.003	NO				
		PM	0.838	D	0.845	D	0.007	NO				
23.	Central Avenue & Victoria Street	AM	0.815	D	0.816	D	0.001	NO				
		PM	0.760	C	0.764	C	0.004	NO				
24.	Hamilton Avenue & Del Amo Blvd	AM	0.608	B	0.612	B	0.004	NO				
		PM	0.945	E	0.956	E	0.011	NO				
25.	Hamilton Avenue & I-110 SB Ramps	AM	59.3	F	60.2	F	0.9	[c]	8.8	A	-50.5	[c]
		PM	131.0	F	136.8	F	5.8	[c]	7.3	A	-123.7	[c]
26.	Figueroa Street & Del Amo Boulevard	AM	0.756	C	0.758	C	0.002	NO				
		PM	1.048	F	1.061	F	0.013	NO				
27.	Figueroa Street & I-110 NB Ramps	AM	0.729	C	0.732	C	0.003	NO				
		PM	0.740	C	0.745	C	0.005	NO				
28.	SR-91 EB Ramps & Albertoni Street	AM	0.558	A	0.558	A	0.000	NO				
		PM	0.626	B	0.626	B	0.000	NO				
29.	Main Street & Broadway	AM	18.8	C	19.4	C	0.6	NO				
		PM	19.1	C	20.2	C	1.1	NO				
30.	New Intersection & MLK Jr Street	AM	New Intersection		0.401	A	0.401	N/A				
		PM			0.623	B	0.623	N/A				
31.	Avalon Boulevard & New Intersection	AM	New Intersection		0.436	A	0.436	N/A				
		PM			0.636	B	0.636	N/A				

Notes:

The analysis in this able is for informational purposes only and prepared using the City of Carson's analysis methodology and significant impact criteria.

AM - Weekday AM Peak Hour, PM - Weekday PM Peak Hour

[a] Column presents, for informational purposes, potential impacts when applying the City of Carson significant impact criteria.

[b] Unsignalized Intersection. The City of Carson does not provide significance thresholds for unsignalized intersections. However, signal warrants were performed for unsignalized intersections in the Traffic Study.

[c] Signal warrants were met under Existing, Existing with Project, and Future with Project Conditions.

TABLE E-2B
FUTURE WITH PROJECT CONDITIONS (YEAR 2020) - SATURDAY
INTERSECTION PEAK HOUR LEVELS OF SERVICE - CITY OF CARSON METHODOLOGY

No.	Signalized Intersection	Peak Hour	Future without Project Conditions (Year 2020)		Future with Project Conditions (Year 2020)				Future with Project Conditions (Year 2020) with Mitigation			
			V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	Change in V/C Ratio	Significant Impact? [a]	V/C Ratio / Delay	LOS	Change in V/C Ratio	Significant Impact? [a]
1.	Main Street & MLK Jr Street	MD	0.680	B	0.822	D	0.142	NO				
2.	Main Street & I-405 NB Off-Ramp	MD	0.453	A	0.474	A	0.021	NO				
3.	Main Street & I-405 SB On-Ramp	MD	0.449	A	0.477	A	0.028	NO				
6.	Avalon Boulevard & SR-91 WB On-Ramp	MD	0.466	A	0.480	A	0.014	NO				
11.	Avalon Boulevard & MLK Jr Street	MD	0.473	A	0.496	A	0.023	NO				
12.	Avalon Boulevard & Elsmere Drive	MD	0.439	A	0.590	A	0.151	NO				
13.	Avalon Boulevard & Turmont Street	MD	0.605	B	0.631	B	0.026	NO				
14.	Avalon Boulevard & Del Amo Boulevard	MD	0.994	E	1.047	F	0.053	YES	0.923	E	-0.071	NO
15.	Avalon Boulevard & I-405 NB Ramps	MD	0.714	C	0.725	C	0.011	NO				
16.	Avalon Boulevard & I-405 SB Ramps	MD	1.076	F	1.117	F	0.041	YES	0.916	E	-0.160	NO
17.	Main Street & SR-91 WB Ramps	MD	0.341	A	0.359	A	0.018	NO				
18.	Main Street & Albertoni Street	MD	0.553	A	0.599	A	0.046	NO	0.583	A	0.030	NO
21.	I-110 NB On-Ramp & 190th Street	MD	0.406	A	0.419	A	0.013	NO				
22.	I-110 SB Off-Ramp & 190th Street	MD	0.637	B	0.649	B	0.012	NO				
28	SR-91 EB Ramps & Albertoni Street	MD	0.442	A	0.446	A	0.004	NO				
30.	New driveway & MLK Jr Street	MD	New Intersection		0.740	C	-	N/A				
31.	Avalon Boulevard & New driveway	MD	New Intersection		0.614	B	-	N/A				

MD - Saturday Midday Peak Hour
[a] Significance based on City of Carson thresholds

Appendix F

Construction Impact Analysis

Appendix F
Construction Traffic

A construction period analysis was performed to identify any temporary traffic impacts associated with the Project's construction activity.

SCHEDULE

This analysis is based on a review of the construction activity schedule provided by the Applicant, which assumes an 11-month duration and is comprised of the following eight phases with tentative active dates:

1. Site Preparation & Demolition (August 2019 through October 2019)
2. Trenching (August 2019 through October 2019)
3. Grading (August 2019 through October 2019)
4. Pile Driving (December 2019 through January 2020)
5. Dynamic Compaction (December 2019 through January 2020)
6. Construction (October 2019 through March 2020)
7. Paving (November 2019 through May 2020)
8. Architectural Coatings (May 2020 through June 2020)

HAUL ROUTES, PARKING, AND STAGING

Haul trucks entering and leaving the project site would primarily use Avalon Boulevard to access I-405 and/or SR 91.

Construction workers would park on-site in designated construction worker parking areas.

Construction equipment, supplies, and materials would be staged on-site.

TRIP GENERATION

The maximum trip activity would occur during the anticipated October 2019 overlap of the Site Preparation & Demolition, Trenching, Grading, and Construction phases.

On a peak day during this period, there would be three main types of construction traffic: haul trips (e.g., soil export and import), vendor trips (e.g., material delivery), and worker trips. There would be a maximum of up to 324 haul trucks, 10 vendor trips and 70 workers to and from the Project site per day.

Truck trips were converted to passenger car equivalent (PCE) trips to account for their greater effect on congestion and travel speeds as compared to passenger cars. Using a PCE factor of 2.0, 324 construction and 10 vendor trucks per day would result in 668 daily PCE trips both to and from the Project site.

While truck trips are typically scheduled outside of the peak hours, this analysis conservatively assumed that haul truck trips and delivery truck trips would occur evenly throughout the day, including during the peak hours. Therefore, the morning and afternoon peak hours each would be affected by an equal number of PCE trips, equal to one tenth the maximum number of trips over a 10-hour workday.

As detailed in Table F-1, the Project is anticipated to generate a maximum of 808 daily PCE trips during the periods of highest construction activity. A total of 137 PCE trips are estimated during both the morning (105 inbound and 32 outbound) and afternoon (32 inbound and 105 outbound) peak hours.

CONSTRUCTION TRAFFIC IMPACTS

The following intersections were analyzed based on the haul routes described above:

6. Avalon Boulevard & SR-91 Westbound On-ramp
7. Avalon Boulevard & Albertoni Street
8. Avalon Boulevard & Victoria Street

9. Avalon Boulevard & 184th Street/StubHub Center Gate
10. Avalon Boulevard & University Drive
11. Avalon Boulevard & Martin Luther King, Jr. Street
12. Avalon Boulevard & Elsmere Drive
13. Avalon Boulevard & Turmont Street
14. Avalon Boulevard & Del Amo Boulevard
15. Avalon Boulevard & I-405 Northbound ramps
16. Avalon Boulevard & I-405 Southbound ramps
31. Avalon Boulevard & New driveway

The following intersections are anticipated to be temporarily impacted by construction traffic activity based peak hour trip generation estimates described above:

14. Avalon Boulevard & Del Amo Boulevard (afternoon peak hour)

In addition to these potential intersection impacts, the Project would require the construction of access driveways, modification of left-turn lanes, and installation of a traffic signals, which may result in temporary lane closures on the street network.

CONSTRUCTION TRAFFIC MANAGEMENT PLAN

To minimize the effects of these temporary traffic impacts during Project construction, the Applicant would implement a Construction Traffic Management Plan. It would be developed prior to the issuance of a Project site grading permit and is anticipated to include the following elements as appropriate:

- Advance notification of upcoming construction activities, including durations and daily hours of construction, to adjacent property owners and occupants as well as nearby schools
- Prohibition of construction worker parking on adjacent residential streets and identification of construction employee parking locations and protocols
- Temporary traffic control during all construction activities adjacent to public rights-of-way to improve traffic flow on public roadways (e.g., flag men)

- Prohibition of construction-related vehicle parking on surrounding public streets
- Safety precautions for pedestrian and bicyclists through such measures as alternate routing and protection barriers as appropriate, including along all identified Los Angeles Unified School District (LAUSD) and Compton Unified School District (CUSD) pedestrian routes to nearby schools
- Scheduling of construction-related deliveries, haul trips, etc., so as to occur outside the commuter peak hours to the extent feasible, and so as to not impede school drop-off and pick-up activities and students using LAUSD/CUSD's identified pedestrian routes to nearby schools
- Coordination with public transit agencies to provide advanced notifications of any anticipated stop relocations and durations
- Provision of advanced notification of any temporary on-street parking removals and duration of removals
- Establishment of construction hours in compliance with Carson Municipal Code
- Establishment of a construction phone number that shall be posted on the Project site and appointment of a construction liaison officer to respond to concerns or inquiries regarding project construction
- Maintenance of unimpeded emergency access to the Project site and nearby properties
- Establishment of truck access and staging areas relative to the haul route approved with the project
- Provision of construction site security

With implementation of the Construction Traffic Management Plan, project construction activities are not expected to have a significant impact with respect to temporary traffic impacts at study area intersections and temporary access impacts.

TABLE F-1
CONSTRUCTION TRIP GENERATION

Construction Activity	Daily Trips	Morning Trips			Afternoon Trips		
		In	Out	Total	In	Out	Total
Site Preparation & Demolition - 3 months (August 2019 through October 2019)							
Worker Trips	20	10	0	10	0	10	10
Haul Trips [a]	318	16	16	32	16	16	32
Total Trips During Phase	**338**	**26**	**16**	**42**	**16**	**26**	**42**
Trenching - 3 months (August 2019 through October 2019)							
Worker Trips	20	10	0	10	0	10	10
Vendor Trips	8	1	0	1	0	1	1
Haul Trips [a]	4	0	0	0	0	0	0
Total Trips During Phase	**32**	**11**	**0**	**11**	**0**	**11**	**11**
Grading - 3 months (August 2019 through October 2019)							
Worker Trips	20	10	0	10	0	10	10
Haul Trips [a]	318	16	16	32	16	16	32
Total Trips During Phase	**338**	**26**	**16**	**42**	**16**	**26**	**42**
Pile Driving - 2 months (December 2019 through January 2020)							
Worker Trips	6	3	0	3	0	3	3
Total Trips During Phase [b]	**6**	**3**	**0**	**3**	**0**	**3**	**3**
Dynamic Compaction - 2 months (December 2019 through January 2020)							
Worker Trips	4	2	0	2	0	2	2
Total Trips During Phase	**4**	**2**	**0**	**2**	**0**	**2**	**2**
Construction - 7 months (October 2019 through March 2020)							
Worker Trips	80	40	0	40	0	40	40
Vendor Trips	12	1	0	1	0	1	1
Haul Trips [a]	8	1	0	1	0	1	1
Total Trips During Phase	**100**	**42**	**0**	**42**	**0**	**42**	**42**
Paving - 7 months (November 2019 through May 2020)							
Worker Trips	30	15	0	15	0	15	15
Haul Trips [a]	6	1	0	1	0	1	1
Total Trips During Phase	**36**	**16**	**0**	**16**	**0**	**16**	**16**
Architectural Coating - 2 months (May 2020 through June 2020)							
Worker Trips	30	15	0	15	0	15	15
Vendor Trips	4	2	0	2	0	2	2
Haul Trips [a,c]	2	0	0	0	0	0	0
Total Trips During Phase	**36**	**17**	**0**	**17**	**0**	**17**	**17**
Peak Activity Total [d]	**808**	**105**	**32**	**137**	**32**	**105**	**137**

Notes:
One month is assumed to be 22 workdays
[a] Haul Trips are multiplied by a factor of 2.0 Passengar Car Equivalency (PCE) based on information provided in HCM 6th Edition Exhibit 12-25.
[b] A total of 10 haul trips (5 inbound and 5 outbound) are anticipated to occur over the two month period. Since these trips would be distributed over a 44 day period, and less than one truck per day would visit the site, these were omitted from the number of daily trips
[c] A total of 44 haul trips (22 inbound and 22 outbound) are anticipated to occur over the two month period. Since these trips would b distributed over a 44 day period, and one truck per day would visit the site, these were omitted from the number of peak hour trips.
[d] The estimated preliminary peak construction period would occur in during the site preparation & demolition, trenching, grading, and paving phases. This total caculates the sum of these periods.

Appendix G

Signal Warrant Analysis

Carol Kimmelman Sports and Academic Campus

Traffic Signal Warrant Analysis
Warrant 3, Peak Hour

25. HAMILTON AVENUE & I-110 SOUTHBOUND OFF-RAMP

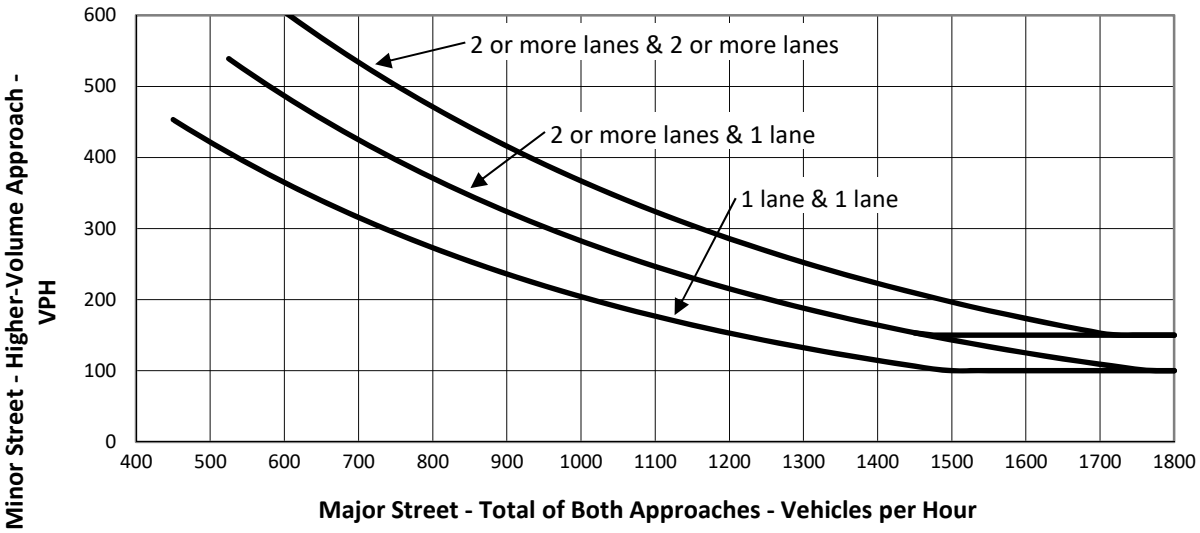
Major Street Name:	Hamilton Avenue	Vehicles per Hour (Peak Hour)	
Minor Street Name:	I-110 Southbound Off-Ramp	Major Street (Approach 1):	803
		Major Street (Approach 2):	595
Major Street Lanes:	2	[a] Major Street Left-Turns:	0
Minor Street Lanes:	1	Minor Street (Higher Volume):	398

[b] Urban/Rural: Urban

Vehicles per Hour (Peak Hour)

Major Street (Approach 1):	803	Minimum Major Street Volume:	510
Major Street (Approach 2):	595	Satisfied?	YES
Total Major Street Volume:	1,398		
		Minimum Minor Street Volume:	165
Major Street Left Turns:	0	Satisfied?	YES
Minor Street (Higher Volume):	398		
Total Minor Street Volume:	398	Warrant 3 Satisfied?	**YES**

Figure 4C-3. Warrant 3, Peak Hour [c]



[a] Major street left-turn volume is added to minor street volume if a protected left-turn signal phase is proposed.

[b] Setting to "Rural" reduces minimum test volumes to approximately 70% of "Urban" test volumes. This may be used when major street speed exceeds 40 mph or in an isolated community of less than 10,000 residents.

[c] From *California Manual on Uniform Traffic Control Devices, 2014 Edition;* Caltrans.

Carol Kimmelman Sports and Academic Campus

Traffic Signal Warrant Analysis
Warrant 3, Peak Hour

29. MAIN STREET & BROADWAY

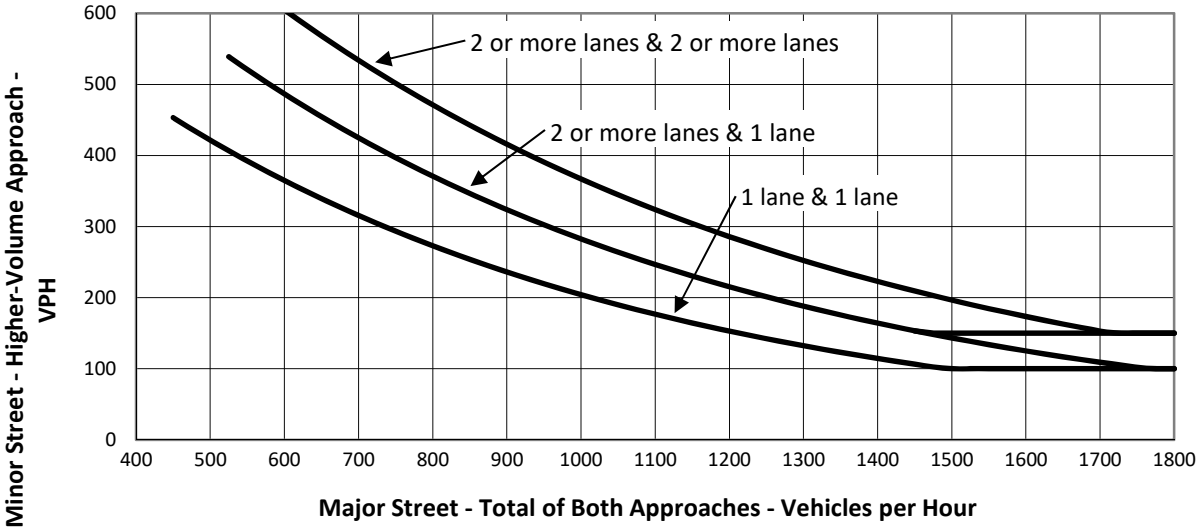
Major Street Name:	Main Street	Vehicles per Hour (Peak Hour)	
Minor Street Name:	Broadway	Major Street (Approach 1):	701
		Major Street (Approach 2):	0
Major Street Lanes:	2	[a] Major Street Left-Turns:	0
Minor Street Lanes:	1	Minor Street (Higher Volume):	215

[b] Urban/Rural: Urban

Vehicles per Hour (Peak Hour)

Major Street (Approach 1):	701	Minimum Major Street Volume:	510
Major Street (Approach 2):	0	Satisfied?	YES
Total Major Street Volume:	701		
		Minimum Minor Street Volume:	424
Major Street Left Turns:	0	Satisfied?	NO
Minor Street (Higher Volume):	215		
Total Minor Street Volume:	215	Warrant 3 Satisfied?	**NO**

Figure 4C-3. Warrant 3, Peak Hour [c]



[a] Major street left-turn volume is added to minor street volume if a protected left-turn signal phase is proposed.

[b] Setting to "Rural" reduces minimum test volumes to approximately 70% of "Urban" test volumes. This may be used when major street speed exceeds 40 mph or in an isolated community of less than 10,000 residents.

[c] From *California Manual on Uniform Traffic Control Devices, 2014 Edition;* Caltrans.

Carol Kimmelman Sports and Academic Campus

Traffic Signal Warrant Analysis
Warrant 3, Peak Hour

25. HAMILTON AVENUE & I-110 SOUTHBOUND OFF-RAMP

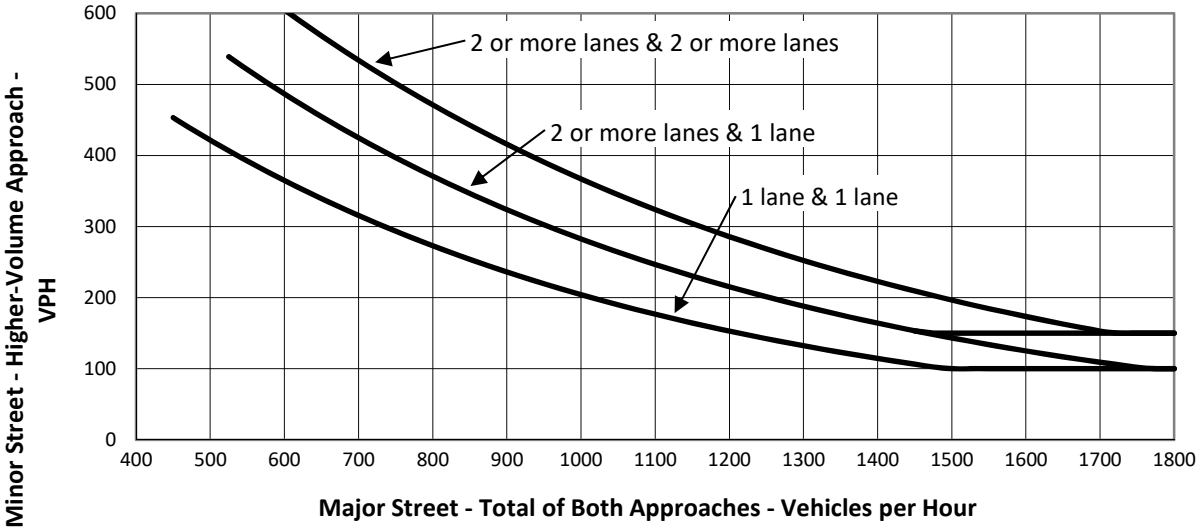
Major Street Name:	Hamilton Avenue	Vehicles per Hour (Peak Hour)	
Minor Street Name:	I-110 Southbound Off-Ramp	Major Street (Approach 1):	817
		Major Street (Approach 2):	595
Major Street Lanes:	2	[a] Major Street Left-Turns:	0
Minor Street Lanes:	1	Minor Street (Higher Volume):	398

[b] Urban/Rural: Urban

Vehicles per Hour (Peak Hour)

Major Street (Approach 1):	817	Minimum Major Street Volume:	510
Major Street (Approach 2):	595	Satisfied?	YES
Total Major Street Volume:	1,412		
		Minimum Minor Street Volume:	161
Major Street Left Turns:	0	Satisfied?	YES
Minor Street (Higher Volume):	398		
Total Minor Street Volume:	398	Warrant 3 Satisfied?	**YES**

Figure 4C-3. Warrant 3, Peak Hour [c]



[a] Major street left-turn volume is added to minor street volume if a protected left-turn signal phase is proposed.

[b] Setting to "Rural" reduces minimum test volumes to approximately 70% of "Urban" test volumes. This may be used when major street speed exceeds 40 mph or in an isolated community of less than 10,000 residents.

[c] From *California Manual on Uniform Traffic Control Devices, 2014 Edition;* Caltrans.

Carol Kimmelman Sports and Academic Campus

Traffic Signal Warrant Analysis
Warrant 3, Peak Hour

29. MAIN STREET & BROADWAY

Major Street Name: Main Street
Minor Street Name: Broadway

Major Street Lanes: 2
Minor Street Lanes: 1

[b] Urban/Rural: Urban

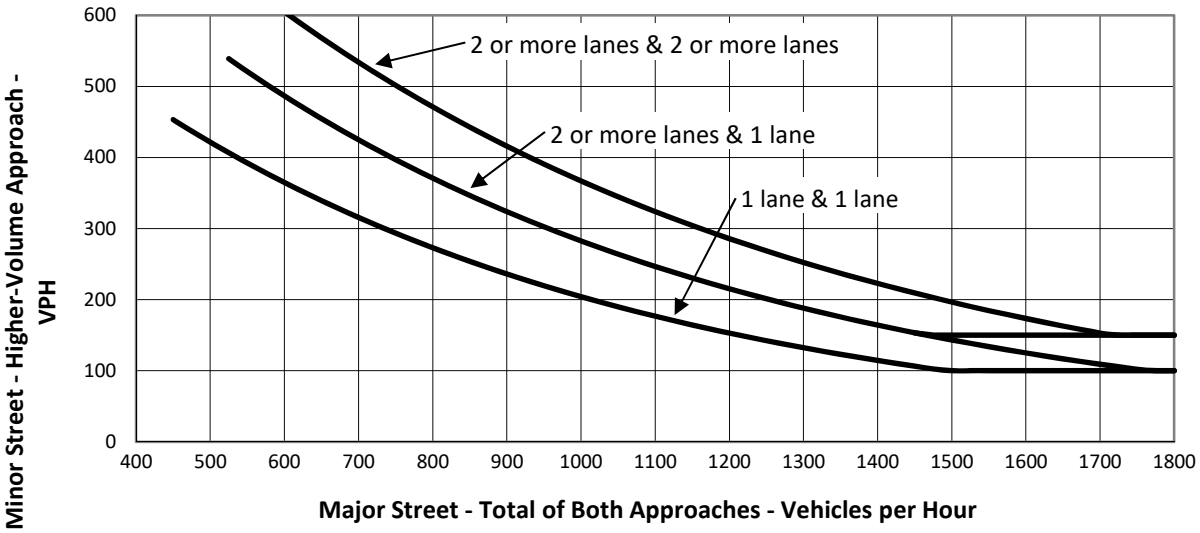
Vehicles per Hour (Peak Hour)	
Major Street (Approach 1):	742
Major Street (Approach 2):	0
[a] Major Street Left-Turns:	0
Minor Street (Higher Volume):	215

Vehicles per Hour (Peak Hour)

Major Street (Approach 1):	742
Major Street (Approach 2):	0
Total Major Street Volume:	742
Major Street Left Turns:	0
Minor Street (Higher Volume):	215
Total Minor Street Volume:	215

Minimum Major Street Volume:	510
Satisfied?	YES
Minimum Minor Street Volume:	401
Satisfied?	NO
Warrant 3 Satisfied?	**NO**

Figure 4C-3. Warrant 3, Peak Hour [c]



[a] Major street left-turn volume is added to minor street volume if a protected left-turn signal phase is proposed.

[b] Setting to "Rural" reduces minimum test volumes to approximately 70% of "Urban" test volumes. This may be used when major street speed exceeds 40 mph or in an isolated community of less than 10,000 residents.

[c] From *California Manual on Uniform Traffic Control Devices, 2014 Edition;* Caltrans.

Carol Kimmelman Sports and Academic Campus

Traffic Signal Warrant Analysis
Warrant 3, Peak Hour

25. HAMILTON AVENUE & I-110 SOUTHBOUND OFF-RAMP

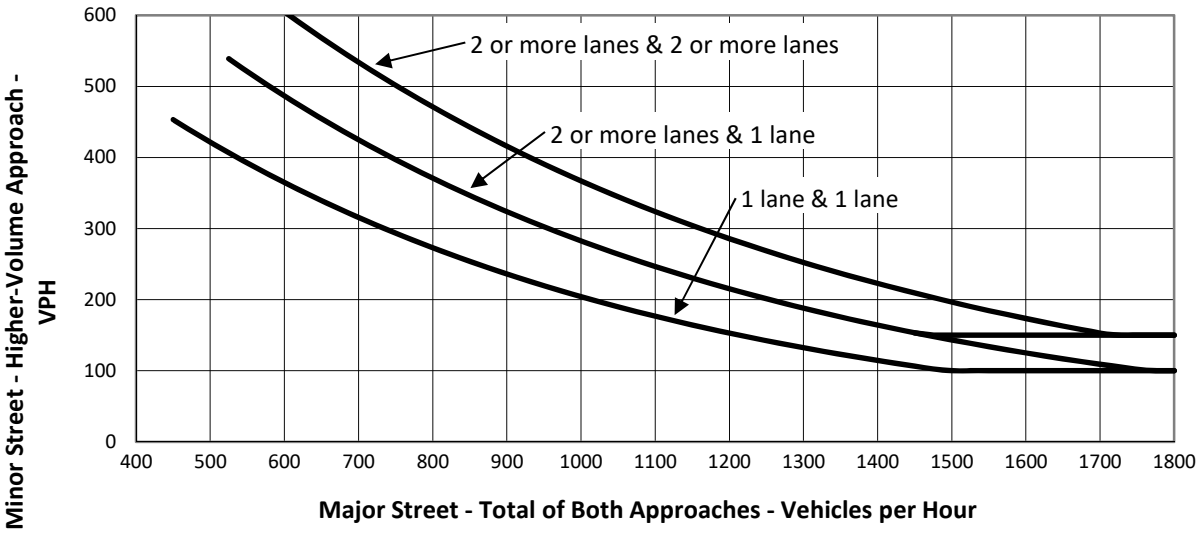
Major Street Name:	Hamilton Avenue	Vehicles per Hour (Peak Hour)	
Minor Street Name:	I-110 Southbound Off-Ramp	Major Street (Approach 1):	902
		Major Street (Approach 2):	595
Major Street Lanes:	2	[a] Major Street Left-Turns:	0
Minor Street Lanes:	1	Minor Street (Higher Volume):	591

[b] Urban/Rural: Urban

Vehicles per Hour (Peak Hour)

Major Street (Approach 1):	902	Minimum Major Street Volume:	510
Major Street (Approach 2):	595	Satisfied?	YES
Total Major Street Volume:	1,497		
		Minimum Minor Street Volume:	144
Major Street Left Turns:	0	Satisfied?	YES
Minor Street (Higher Volume):	591		
Total Minor Street Volume:	591	Warrant 3 Satisfied?	**YES**

Figure 4C-3. Warrant 3, Peak Hour [c]



[a] Major street left-turn volume is added to minor street volume if a protected left-turn signal phase is proposed.

[b] Setting to "Rural" reduces minimum test volumes to approximately 70% of "Urban" test volumes. This may be used when major street speed exceeds 40 mph or in an isolated community of less than 10,000 residents.

[c] From *California Manual on Uniform Traffic Control Devices, 2014 Edition;* Caltrans.

Carol Kimmelman Sports and Academic Campus

Traffic Signal Warrant Analysis
Warrant 3, Peak Hour

29. MAIN STREET & BROADWAY

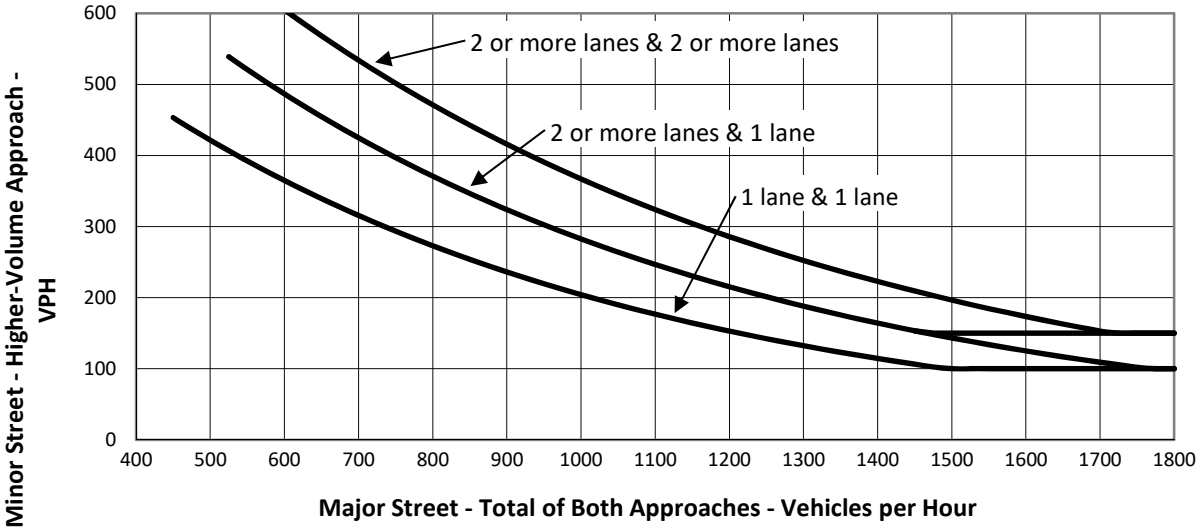
Major Street Name:	Main Street	Vehicles per Hour (Peak Hour)	
Minor Street Name:	Broadway	Major Street (Approach 1):	815
		Major Street (Approach 2):	0
Major Street Lanes:	2	[a] Major Street Left-Turns:	0
Minor Street Lanes:	1	Minor Street (Higher Volume):	215

[b] Urban/Rural: Urban

Vehicles per Hour (Peak Hour)

Major Street (Approach 1):	815	Minimum Major Street Volume:	510
Major Street (Approach 2):	0	Satisfied?	YES
Total Major Street Volume:	815		
		Minimum Minor Street Volume:	363
Major Street Left Turns:	0	Satisfied?	NO
Minor Street (Higher Volume):	215		
Total Minor Street Volume:	215	Warrant 3 Satisfied?	**NO**

Figure 4C-3. Warrant 3, Peak Hour [c]



[a] Major street left-turn volume is added to minor street volume if a protected left-turn signal phase is proposed.

[b] Setting to "Rural" reduces minimum test volumes to approximately 70% of "Urban" test volumes. This may be used when major street speed exceeds 40 mph or in an isolated community of less than 10,000 residents.

[c] From *California Manual on Uniform Traffic Control Devices, 2014 Edition;* Caltrans.

Appendix H

Caltrans Analysis

Intersection Level Of Service Report
Intersection 2: Main Street & I-405 NB Off-Ramp

Control Type:	Signalized	Delay (sec / veh):	11.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.649

Intersection Setup

Name	Main Street			Main Street			I-405 NB Off-Ramp			I-405 NB Off-Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Main Street			Main Street			I-405 NB Off-Ramp			I-405 NB Off-Ramp		
Base Volume Input [veh/h]	28	657	0	0	724	70	0	0	0	87	324	232
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	28	657	0	0	724	70	0	0	0	87	324	232
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	164	0	0	181	18	0	0	0	22	81	58
Total Analysis Volume [veh/h]	28	657	0	0	724	70	0	0	0	87	324	232
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	7	4	0	0	8	0	0	0	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	30	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	9	35	0	0	26	0	0	0	0	0	25	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	0	10	0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.5	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C		C	C
C, Cycle Length [s]	35	35	35	35		35	35
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	1	17	11	11		10	10
g / C, Green / Cycle	0.03	0.47	0.31	0.31		0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.02	0.18	0.21	0.22		0.19	0.19
s, saturation flow rate [veh/h]	1781	3560	1870	1814		1847	1491
c, Capacity [veh/h]	62	1669	575	557		514	414
d1, Uniform Delay [s]	16.82	6.15	10.83	10.92		11.46	11.50
k, delay calibration	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	5.03	0.15	1.50	1.71		1.66	2.13
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.45	0.39	0.69	0.71		0.69	0.70
d, Delay for Lane Group [s/veh]	21.85	6.30	12.32	12.62		13.12	13.63
Lane Group LOS	C	A	B	B		B	B
Critical Lane Group	Yes	No	No	Yes		No	Yes
50th-Percentile Queue Length [veh]	0.27	0.98	2.22	2.26		2.08	1.76
50th-Percentile Queue Length [ft]	6.87	24.47	55.52	56.57		52.08	44.00
95th-Percentile Queue Length [veh]	0.49	1.76	4.00	4.07		3.75	3.17
95th-Percentile Queue Length [ft]	12.36	44.04	99.94	101.83		93.75	79.21

Movement, Approach, & Intersection Results

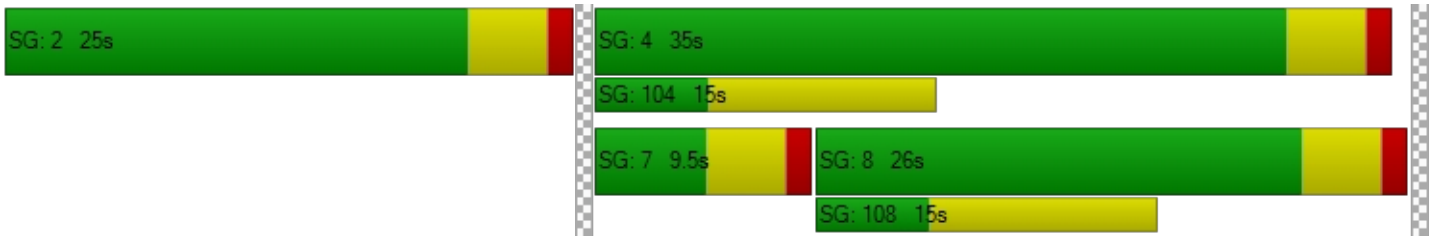
d_M, Delay for Movement [s/veh]	21.85	6.30	0.00	0.00	12.46	12.62	0.00	0.00	0.00	13.12	13.21	13.63
Movement LOS	C	A			B	B				B	B	B
d_A, Approach Delay [s/veh]	6.94			12.47			0.00			13.35		
Approach LOS	A			B			A			B		
d_I, Intersection Delay [s/veh]	10.95											
Intersection LOS	B											
Intersection V/C	0.649											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.901	2.009
Crosswalk LOS	F	F	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1017	717	0	683
d_b, Bicycle Delay [s]	7.25	12.35	30.00	13.00
l_b,int, Bicycle LOS Score for Intersection	2.125	2.215	4.132	2.090
Bicycle LOS	B	B	D	B

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Main Street & I-405 SB On Ramp

Control Type:	Signalized	Delay (sec / veh):	7.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.547

Intersection Setup

Name	Main Street			Main Street			I-405 SB On Ramp			I-405 SB On Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			30.00			30.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No			No			No				
Crosswalk		Yes			No			Yes			Yes	

Volumes

Name	Main Street			Main Street			I-405 SB On Ramp			I-405 SB On Ramp		
Base Volume Input [veh/h]	0	599	52	146	723	0	29	71	21	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	599	52	146	723	0	29	71	21	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	150	13	37	181	0	7	18	5	0	0	0
Total Analysis Volume [veh/h]	0	599	52	146	723	0	29	71	21	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	4	0	3	8	0	0	6	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	5	0	5	5	0	0	5	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	0	30	0	0	0	0
Amber [s]	0.0	3.5	0.0	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	0	19	0	22	41	0	0	19	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	0	0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.5	0.0	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No			No				
Maximum Recall		No		No	No			No				
Pedestrian Recall		No		No	No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	L	C	
C, Cycle Length [s]	28	28	28	28	28	28	
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	
g_i, Effective Green Time [s]	8	8	3	16	3	3	
g / C, Green / Cycle	0.28	0.28	0.12	0.57	0.11	0.11	
(v / s)_i Volume / Saturation Flow Rate	0.17	0.18	0.08	0.20	0.02	0.05	
s, saturation flow rate [veh/h]	1870	1819	1781	3560	1781	1798	
c, Capacity [veh/h]	531	517	221	2023	198	200	
d1, Uniform Delay [s]	8.71	8.77	11.74	3.29	11.27	11.68	
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	1.15	1.27	3.38	0.11	0.34	1.64	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.61	0.63	0.66	0.36	0.15	0.46	
d, Delay for Lane Group [s/veh]	9.87	10.04	15.12	3.39	11.61	13.33	
Lane Group LOS	A	B	B	A	B	B	
Critical Lane Group	No	Yes	Yes	No	No	Yes	
50th-Percentile Queue Length [veh]	1.23	1.24	0.83	0.25	0.14	0.48	
50th-Percentile Queue Length [ft]	30.65	31.12	20.76	6.13	3.42	12.02	
95th-Percentile Queue Length [veh]	2.21	2.24	1.49	0.44	0.25	0.87	
95th-Percentile Queue Length [ft]	55.16	56.02	37.37	11.04	6.16	21.63	

Movement, Approach, & Intersection Results

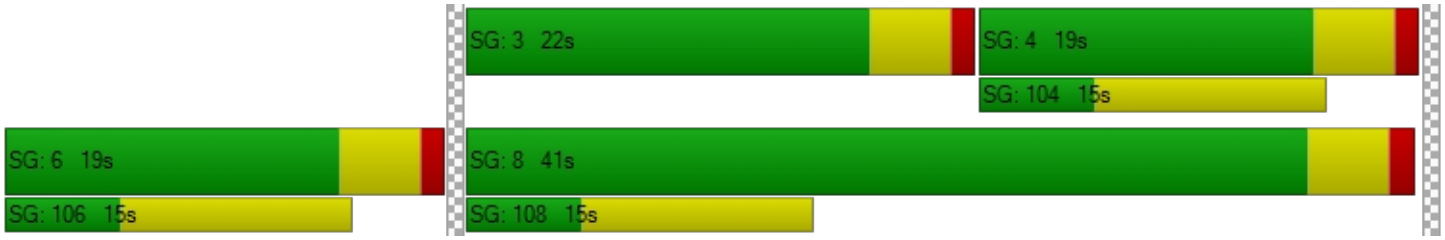
d_M, Delay for Movement [s/veh]	0.00	9.94	10.04	15.12	3.39	0.00	11.61	13.33	13.33	0.00	0.00	0.00
Movement LOS		A	B	B	A		B	B	B			
d_A, Approach Delay [s/veh]	9.95			5.36			12.91			0.00		
Approach LOS	A			A			B			A		
d_I, Intersection Delay [s/veh]	7.74											
Intersection LOS	A											
Intersection V/C	0.547											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.452	0.000	1.755	1.666
Crosswalk LOS	B	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	483	1217	483	0
d_b, Bicycle Delay [s]	17.25	4.60	17.25	30.00
l_b,int, Bicycle LOS Score for Intersection	2.097	2.277	1.759	4.132
Bicycle LOS	B	B	A	D

Sequence

Ring 1	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Avalon Boulevard & SR-91 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	8.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.520

Intersection Setup

Name	Avalon Boulevard		Avalon Boulevard		SR-91 WB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name	Avalon Boulevard		Avalon Boulevard		SR-91 WB Ramps	
Base Volume Input [veh/h]	912	160	177	1088	334	600
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	912	160	177	1088	334	600
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	228	40	44	272	84	150
Total Analysis Volume [veh/h]	912	160	177	1088	334	600
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	4	0	0	8	2	0
Auxiliary Signal Groups						
Lead / Lag	-	-	-	-	Lead	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.5	0.0	0.0	3.5	3.5	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	30	0	0	30	30	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	2.5	2.5	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	C	R
C, Cycle Length [s]	37	37	37	37	37	37	37
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	17	17	17	17	11	11	11
g / C, Green / Cycle	0.46	0.46	0.46	0.46	0.30	0.30	0.30
(v / s)_i Volume / Saturation Flow Rate	0.18	0.10	0.15	0.21	0.18	0.19	0.19
s, saturation flow rate [veh/h]	5094	1589	1188	5094	1781	1600	1589
c, Capacity [veh/h]	2344	731	542	2344	530	476	473
d1, Uniform Delay [s]	6.59	6.02	10.90	6.88	11.14	11.36	11.38
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.11	0.15	0.35	0.14	1.07	1.50	1.54
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.39	0.22	0.33	0.46	0.59	0.65	0.65
d, Delay for Lane Group [s/veh]	6.70	6.17	11.25	7.03	12.21	12.87	12.92
Lane Group LOS	A	A	B	A	B	B	B
Critical Lane Group	No	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh]	1.01	0.50	0.48	1.26	1.83	1.88	1.88
50th-Percentile Queue Length [ft]	25.20	12.59	12.04	31.44	45.83	46.96	47.04
95th-Percentile Queue Length [veh]	1.81	0.91	0.87	2.26	3.30	3.38	3.39
95th-Percentile Queue Length [ft]	45.35	22.65	21.68	56.60	82.49	84.52	84.67

Movement, Approach, & Intersection Results

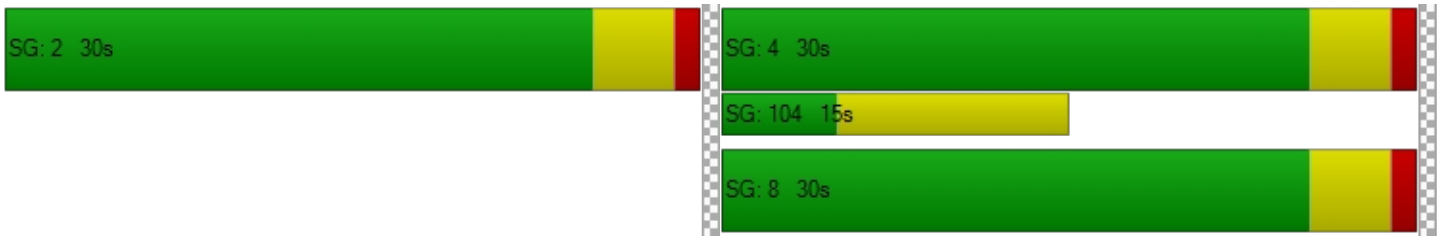
d_M, Delay for Movement [s/veh]	6.70	6.17	11.25	7.03	12.25	12.89
Movement LOS	A	A	B	A	B	B
d_A, Approach Delay [s/veh]	6.62		7.62		12.66	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	8.73					
Intersection LOS	A					
Intersection V/C	0.520					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.780
Crosswalk LOS	F	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.722	4.828	5.674
Bicycle LOS	E	E	F

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Avalon Boulevard & I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	7.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.551

Intersection Setup

Name	Avalon Boulevard			Avalon Boulevard			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Avalon Boulevard			Avalon Boulevard			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	414	1117	0	0	769	257	0	0	0	66	0	420
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	414	1117	0	0	769	257	0	0	0	66	0	420
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	104	279	0	0	192	64	0	0	0	17	0	105
Total Analysis Volume [veh/h]	414	1117	0	0	769	257	0	0	0	66	0	420
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss	Permiss	Permiss	Unsigna
Signal group	7	4	0	0	8	0	0	0	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	30	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	14	33	0	0	19	0	0	0	0	0	27	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	0	10	0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.5	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C		L	C
C, Cycle Length [s]	30	30	30		30	30
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	6	19	8		2	2
g / C, Green / Cycle	0.21	0.63	0.27		0.07	0.07
(v / s)_i Volume / Saturation Flow Rate	0.12	0.31	0.15		0.02	0.02
s, saturation flow rate [veh/h]	3459	3560	5094		1781	1781
c, Capacity [veh/h]	722	2248	1396		128	128
d1, Uniform Delay [s]	10.77	3.00	9.41		13.31	13.31
k, delay calibration	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	0.72	0.17	0.34		1.06	1.06
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.57	0.50	0.55		0.26	0.26
d, Delay for Lane Group [s/veh]	11.49	3.17	9.75		14.37	14.37
Lane Group LOS	B	A	A		B	B
Critical Lane Group	No	Yes	No		Yes	No
50th-Percentile Queue Length [veh]	0.96	0.23	1.01		0.20	0.20
50th-Percentile Queue Length [ft]	23.91	5.67	25.35		5.07	5.07
95th-Percentile Queue Length [veh]	1.72	0.41	1.82		0.36	0.36
95th-Percentile Queue Length [ft]	43.04	10.21	45.62		9.12	9.12

Movement, Approach, & Intersection Results

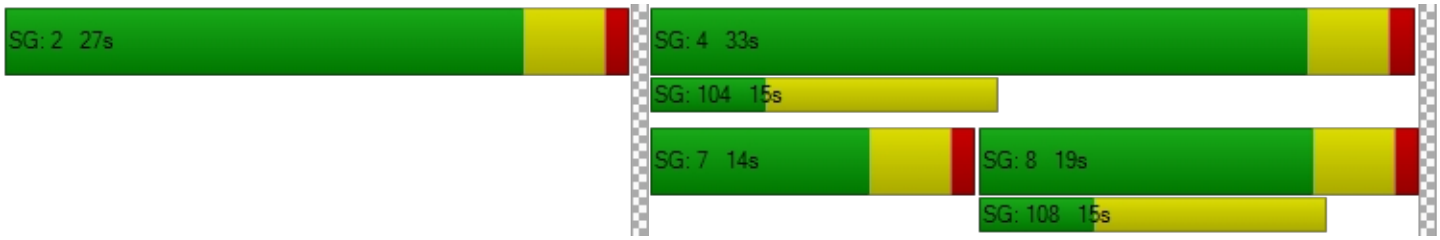
d_M, Delay for Movement [s/veh]	11.49	3.17	0.00	0.00	9.75	0.00	0.00	0.00	0.00	14.37	14.37	0.00
Movement LOS	B	A			A					B	B	
d_A, Approach Delay [s/veh]	5.42			9.75			0.00			14.37		
Approach LOS	A			A			A			B		
d_I, Intersection Delay [s/veh]	7.08											
Intersection LOS	A											
Intersection V/C	0.551											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.897	1.942
Crosswalk LOS	F	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	950	483	0	750
d_b, Bicycle Delay [s]	8.27	17.25	30.00	11.72
l_b,int, Bicycle LOS Score for Intersection	2.823	1.983	4.132	1.669
Bicycle LOS	C	A	D	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 16: Avalon Boulevard & I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	8.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.779

Intersection Setup

Name	Avalon Boulevard			Avalon Boulevard			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Avalon Boulevard			Avalon Boulevard			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	0	1015	100	0	570	268	442	13	554	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1015	100	0	570	268	442	13	554	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	254	25	0	143	67	111	3	139	0	0	0
Total Analysis Volume [veh/h]	0	1015	100	0	570	268	442	13	554	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss
Signal group	7	4	0	0	8	0	0	6	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	5	0	0	0	0
Maximum Green [s]	30	30	0	0	30	0	0	30	0	0	0	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	9	28	0	0	19	0	0	32	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	0	0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Minimum Recall	No	No			No			No				
Maximum Recall	No	No			No			No				
Pedestrian Recall	No	No			No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	C	
C, Cycle Length [s]	27	27	27	27	27	27	
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	
g_i, Effective Green Time [s]	0	12	12	7	6	6	
g / C, Green / Cycle	0.00	0.43	0.43	0.27	0.23	0.23	
(v / s)_i Volume / Saturation Flow Rate	0.00	0.30	0.30	0.16	0.13	0.00	
s, saturation flow rate [veh/h]	1781	1870	1812	3560	3459	3560	
c, Capacity [veh/h]	1	813	787	952	803	827	
d1, Uniform Delay [s]	0.00	6.19	6.19	8.63	9.13	7.99	
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.00	1.09	1.13	0.61	0.59	0.01	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.00	0.70	0.70	0.60	0.55	0.02	
d, Delay for Lane Group [s/veh]	0.00	7.28	7.32	9.24	9.72	8.00	
Lane Group LOS	A	A	A	A	A	A	
Critical Lane Group	No	No	Yes	No	Yes	No	
50th-Percentile Queue Length [veh]	0.00	1.33	1.30	0.96	0.79	0.02	
50th-Percentile Queue Length [ft]	0.00	33.35	32.54	23.99	19.69	0.49	
95th-Percentile Queue Length [veh]	0.00	2.40	2.34	1.73	1.42	0.04	
95th-Percentile Queue Length [ft]	0.00	60.02	58.56	43.19	35.44	0.88	

Movement, Approach, & Intersection Results

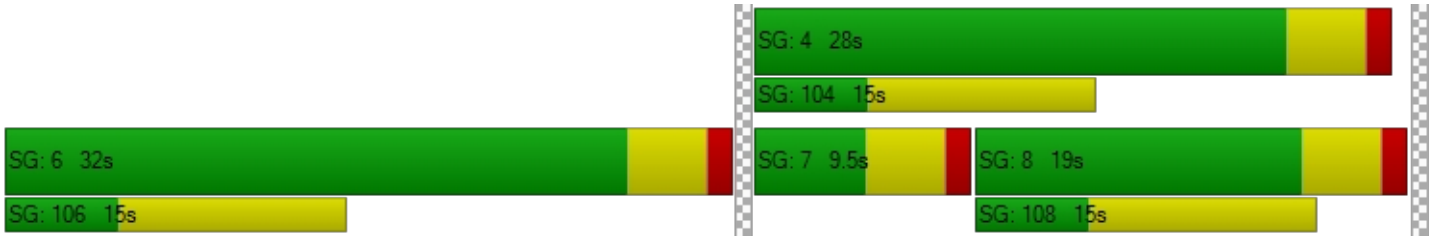
d_M, Delay for Movement [s/veh]	0.00	7.30	7.32	0.00	9.24	0.00	9.72	8.00	0.00	0.00	0.00	0.00
Movement LOS	A	A	A		A		A	A				
d_A, Approach Delay [s/veh]	7.30			9.24			9.67			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	8.32											
Intersection LOS	A											
Intersection V/C	0.779											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.609	0.000	2.507	1.751
Crosswalk LOS	B	F	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	783	483	917	0
d_b, Bicycle Delay [s]	11.10	17.25	8.80	30.00
l_b,int, Bicycle LOS Score for Intersection	2.479	2.030	1.935	4.132
Bicycle LOS	B	B	A	D

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 17: Main Street & SR 91 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	13.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.674

Intersection Setup

Name	Main Street			Main Street			SR-91 WB Ramps			SR-91 WB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			No			Yes		

Volumes

Name	Main Street			Main Street			SR-91 WB Ramps			SR-91 WB Ramps		
Base Volume Input [veh/h]	0	533	93	65	486	0	0	0	0	461	0	405
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	533	93	65	486	0	0	0	0	461	0	405
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	133	23	16	122	0	0	0	0	115	0	101
Total Analysis Volume [veh/h]	0	533	93	65	486	0	0	0	0	461	0	405
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	7	4	0	3	8	0	0	0	0	2	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	30	30	0	0	0	0	30	0	0
Amber [s]	3.5	3.5	0.0	3.5	3.5	0.0	0.0	0.0	0.0	3.5	0.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	9	22	0	9	22	0	0	0	0	29	0	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	5	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	10	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	2.5	2.5	0.0	0.0	0.0	0.0	2.5	0.0	0.0
Minimum Recall	No	No		No	No					No		
Maximum Recall	No	No		No	No					No		
Pedestrian Recall	No	No		No	No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C		L	R
C, Cycle Length [s]	39	39	39	39	39		39	39
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	0	10	10	3	12		13	13
g / C, Green / Cycle	0.00	0.25	0.25	0.07	0.31		0.34	0.34
(v / s)_i Volume / Saturation Flow Rate	0.00	0.17	0.17	0.04	0.14		0.26	0.25
s, saturation flow rate [veh/h]	1781	1870	1775	1781	3560		1781	1589
c, Capacity [veh/h]	0	463	439	117	1114		612	547
d1, Uniform Delay [s]	0.00	13.45	13.47	17.83	10.76		11.43	11.37
k, delay calibration	0.11	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	0.00	1.86	2.00	4.05	0.27		1.90	2.00
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.69	0.70	0.55	0.44		0.75	0.74
d, Delay for Lane Group [s/veh]	0.00	15.31	15.47	21.88	11.03		13.34	13.37
Lane Group LOS	A	B	B	C	B		B	B
Critical Lane Group	No	No	Yes	Yes	No		Yes	No
50th-Percentile Queue Length [veh]	0.00	2.29	2.21	0.62	1.34		2.98	2.62
50th-Percentile Queue Length [ft]	0.00	57.31	55.20	15.59	33.42		74.42	65.56
95th-Percentile Queue Length [veh]	0.00	4.13	3.97	1.12	2.41		5.36	4.72
95th-Percentile Queue Length [ft]	0.00	103.16	99.37	28.06	60.16		133.96	118.00

Movement, Approach, & Intersection Results

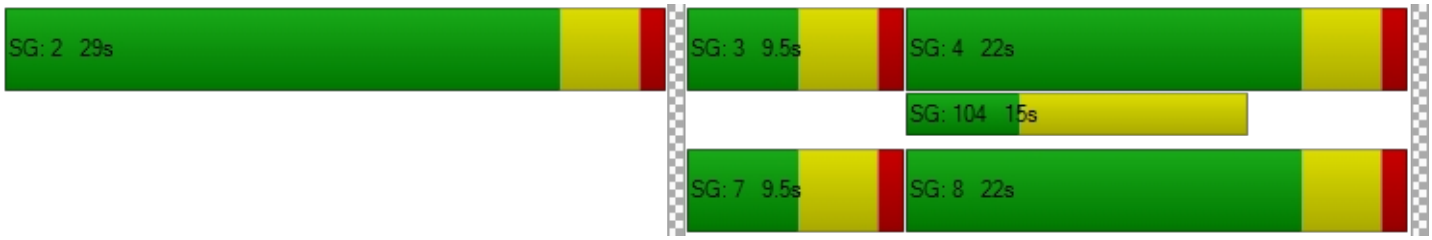
d_M, Delay for Movement [s/veh]	0.00	15.38	15.47	21.88	11.03	0.00	0.00	0.00	0.00	13.34	0.00	13.37
Movement LOS	A	B	B	C	B					B		B
d_A, Approach Delay [s/veh]	15.39			12.31			0.00			13.35		
Approach LOS	B			B			A			B		
d_I, Intersection Delay [s/veh]	13.70											
Intersection LOS	B											
Intersection V/C	0.674											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.254
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	583	583	0	0
d_b, Bicycle Delay [s]	15.05	15.05	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	2.076	2.014	4.132	4.132
Bicycle LOS	B	B	D	D

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 21: I-110 NB On-Ramp & 190th Street

Control Type:	Signalized	Delay (sec / veh):	6.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.438

Intersection Setup

Name	I-110 NB On Ramp			I-110 NB On Ramp			190th Street			190th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	No			Yes			No			No		

Volumes

Name	I-110 NB On Ramp			I-110 NB On Ramp			190th Street			190th Street		
Base Volume Input [veh/h]	0	0	0	0	0	0	158	810	0	0	555	198
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	158	810	0	0	555	198
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	40	203	0	0	139	50
Total Analysis Volume [veh/h]	0	0	0	0	0	0	158	810	0	0	555	198
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	0	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	0	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	30	30	0
Amber [s]	0.0	3.5	0.0	0.0	0.0	0.0	3.5	3.5	0.0	3.5	3.5	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	11	0	0	0	0	19	40	0	9	30	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.5	0.0	0.0	0.0	0.0	2.5	2.5	0.0	2.5	2.5	0.0
Minimum Recall		No					No	No		No	No	
Maximum Recall		No					No	No		No	No	
Pedestrian Recall		No					No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C		L	C	C	L	C	R
C, Cycle Length [s]	24		24	24	24	24	24	24
L, Total Lost Time per Cycle [s]	4.50		4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50		2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	0		3	10	10	0	7	7
g / C, Green / Cycle	0.00		0.14	0.43	0.43	0.00	0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.00		0.05	0.22	0.22	0.00	0.16	0.12
s, saturation flow rate [veh/h]	1870		3459	1870	1870	1781	3560	1589
c, Capacity [veh/h]	1		480	807	807	1	1045	466
d1, Uniform Delay [s]	0.00		9.25	4.91	4.91	0.00	7.04	6.79
k, delay calibration	0.11		0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00		0.40	0.48	0.48	0.00	0.42	0.61
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00		0.33	0.50	0.50	0.00	0.53	0.42
d, Delay for Lane Group [s/veh]	0.00		9.65	5.39	5.39	0.00	7.46	7.40
Lane Group LOS	A		A	A	A	A	A	A
Critical Lane Group	No		No	Yes	No	No	No	No
50th-Percentile Queue Length [veh]	0.00		0.26	0.56	0.56	0.00	0.65	0.48
50th-Percentile Queue Length [ft]	0.00		6.45	13.96	13.96	0.00	16.13	12.03
95th-Percentile Queue Length [veh]	0.00		0.46	1.00	1.00	0.00	1.16	0.87
95th-Percentile Queue Length [ft]	0.00		11.61	25.12	25.12	0.00	29.03	21.66

Movement, Approach, & Intersection Results

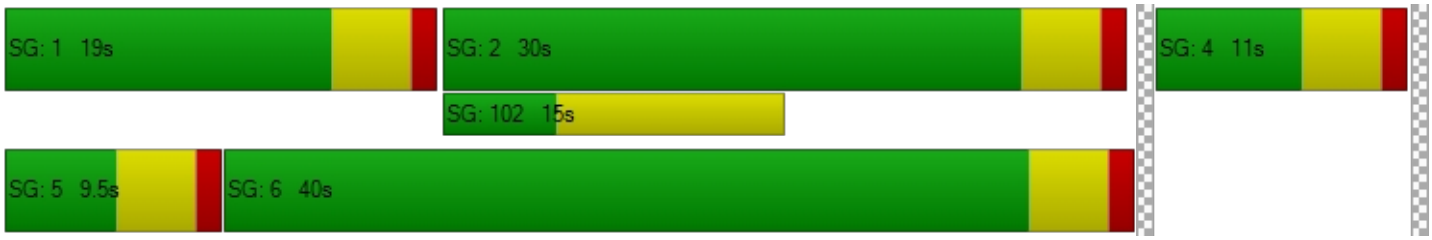
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00	9.65	5.39	5.39	0.00	7.46	7.40
Movement LOS	A	A	A				A	A	A	A	A	A
d_A, Approach Delay [s/veh]	0.00			0.00			6.09			7.44		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	6.68											
Intersection LOS	A											
Intersection V/C	0.438											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	21.68	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	1.869	0.000	0.000
Crosswalk LOS	F	A	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	217	0	1183	850
d_b, Bicycle Delay [s]	23.85	30.00	5.00	9.92
l_b,int, Bicycle LOS Score for Intersection	1.560	4.132	2.358	2.181
Bicycle LOS	A	D	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 22: I-110 SB Off-Ramp & 190th Street

Control Type:	Signalized	Delay (sec / veh):	13.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.804

Intersection Setup

Name	I-110 SB Off-Ramp		190th Street		190th Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	I-110 SB Off-Ramp		190th Street		190th Street	
Base Volume Input [veh/h]	228	718	0	704	580	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	228	718	0	704	580	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	57	180	0	176	145	0
Total Analysis Volume [veh/h]	228	718	0	704	580	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	8	0	0	6	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.5	0.0	0.0	3.5	3.5	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	40	0	0	20	20	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	2.5	2.5	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	42	42	42	42
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	21	21	11	11
g / C, Green / Cycle	0.51	0.51	0.27	0.27
(v / s)_i Volume / Saturation Flow Rate	0.13	0.45	0.20	0.11
s, saturation flow rate [veh/h]	1781	1589	3560	5094
c, Capacity [veh/h]	914	816	966	1382
d1, Uniform Delay [s]	5.67	9.02	13.81	12.51
k, delay calibration	0.11	0.17	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.14	5.07	1.07	0.20
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.25	0.88	0.73	0.42
d, Delay for Lane Group [s/veh]	5.81	14.09	14.89	12.71
Lane Group LOS	A	B	B	B
Critical Lane Group	No	Yes	Yes	No
50th-Percentile Queue Length [veh]	0.75	4.74	2.57	1.23
50th-Percentile Queue Length [ft]	18.85	118.62	64.37	30.87
95th-Percentile Queue Length [veh]	1.36	8.32	4.63	2.22
95th-Percentile Queue Length [ft]	33.93	207.92	115.86	55.56

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	5.81	14.09	0.00	14.89	12.71	0.00
Movement LOS	A	B		B	B	
d_A, Approach Delay [s/veh]	12.10		14.89		12.71	
Approach LOS	B		B		B	
d_I, Intersection Delay [s/veh]	13.14					
Intersection LOS	B					
Intersection V/C	0.804					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	2.157	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.132	4.713	4.451
Bicycle LOS	D	E	E

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	All-way stop	Delay (sec / veh):	40.0
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.976

Intersection Setup

Name	Hamilton Ave		Hamilton Ave		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Ave		Hamilton Ave		I-110 SB Ramps	
Base Volume Input [veh/h]	79	110	331	95	764	234
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	79	110	331	95	764	234
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	28	83	24	191	59
Total Analysis Volume [veh/h]	79	110	331	95	764	234
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	455	502	451	483	511	555
Degree of Utilization, x	0.17	0.22	0.73	0.20	0.98	0.90

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.62	0.83	5.93	0.73	12.95	10.60
95th-Percentile Queue Length [ft]	15.54	20.74	148.13	18.14	323.64	264.99
Approach Delay [s/veh]	12.05		25.71		51.35	
Approach LOS	B		D		F	
Intersection Delay [s/veh]	39.97					
Intersection LOS	E					

Intersection Level Of Service Report
Intersection 27: Figueroa Street & I-110 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	15.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.706

Intersection Setup

Name	Figueroa Street		Figueroa Street		I-110 NB Ramps	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name	Figueroa Street		Figueroa Street		I-110 NB Ramps	
Base Volume Input [veh/h]	657	599	411	126	549	223
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	657	599	411	126	549	223
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	164	150	103	32	137	56
Total Analysis Volume [veh/h]	657	599	411	126	549	223
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	7	4	8	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	5	5	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.5	3.5	3.5	0.0	3.5	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	19	38	19	0	22	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	10	10	0	10	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	2.5	0.0	2.5	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	C
C, Cycle Length [s]	49	49	49	49	49	49
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	13	25	8	8	14	14
g / C, Green / Cycle	0.26	0.52	0.17	0.17	0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.19	0.17	0.12	0.08	0.22	0.23
s, saturation flow rate [veh/h]	3459	3560	3560	1589	1781	1663
c, Capacity [veh/h]	890	1866	622	278	519	484
d1, Uniform Delay [s]	16.61	6.64	18.79	18.05	15.74	15.85
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.22	0.10	1.21	1.16	2.34	2.74
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.74	0.32	0.66	0.45	0.76	0.78
d, Delay for Lane Group [s/veh]	17.83	6.74	20.00	19.21	18.08	18.59
Lane Group LOS	B	A	B	B	B	B
Critical Lane Group	Yes	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh]	3.05	1.30	2.03	1.22	3.74	3.64
50th-Percentile Queue Length [ft]	76.32	32.58	50.65	30.53	93.39	90.88
95th-Percentile Queue Length [veh]	5.50	2.35	3.65	2.20	6.72	6.54
95th-Percentile Queue Length [ft]	137.38	58.65	91.18	54.96	168.11	163.58

Movement, Approach, & Intersection Results

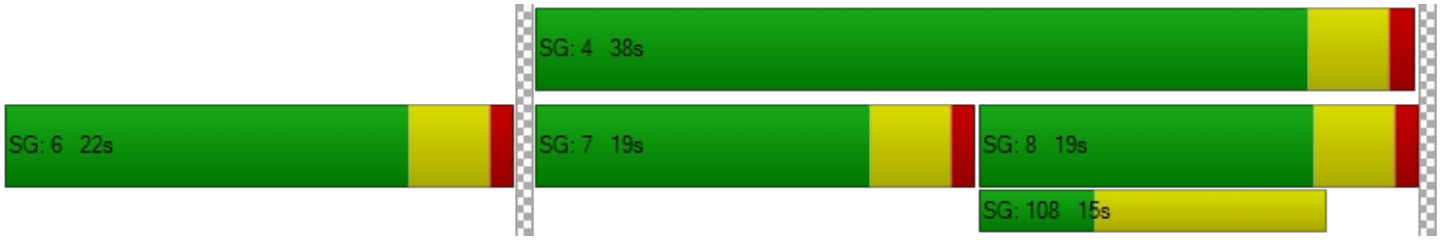
d_M, Delay for Movement [s/veh]	17.83	6.74	20.00	19.21	18.23	18.59
Movement LOS	B	A	B	B	B	B
d_A, Approach Delay [s/veh]	12.54		19.81		18.33	
Approach LOS	B		B		B	
d_I, Intersection Delay [s/veh]	15.81					
Intersection LOS	B					
Intersection V/C	0.706					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.491
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
I_b,int, Bicycle LOS Score for Intersection	5.169	4.575	5.406
Bicycle LOS	F	E	F

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 28: SR 91 EB Ramps & Albertoni Street

Control Type:	Signalized	Delay (sec / veh):	12.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.603

Intersection Setup

Name	SR 91 EB Ramps		Albertoni Street		Albertoni Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	SR 91 EB Ramps		Albertoni Street		Albertoni Street	
Base Volume Input [veh/h]	278	226	275	328	495	88
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	278	226	275	328	495	88
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	70	57	69	82	124	22
Total Analysis Volume [veh/h]	278	226	275	328	495	88
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal group	8	0	1	6	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.5	0.0	3.5	3.5	3.5	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	23	0	14	37	23	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	2.5	2.5	2.5	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	L	C	C	C
C, Cycle Length [s]	36	36	36	36	36	36
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	8	8	5	18	9	9
g / C, Green / Cycle	0.23	0.23	0.14	0.51	0.24	0.24
(v / s)_i Volume / Saturation Flow Rate	0.16	0.14	0.08	0.09	0.16	0.16
s, saturation flow rate [veh/h]	1781	1589	3459	3560	1870	1775
c, Capacity [veh/h]	417	373	496	1829	457	434
d1, Uniform Delay [s]	12.41	12.21	14.24	4.65	12.09	12.21
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.83	1.59	0.97	0.05	1.49	1.82
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.67	0.61	0.55	0.18	0.64	0.67
d, Delay for Lane Group [s/veh]	14.24	13.80	15.21	4.70	13.57	14.02
Lane Group LOS	B	B	B	A	B	B
Critical Lane Group	Yes	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh]	1.76	1.40	0.90	0.36	1.77	1.82
50th-Percentile Queue Length [ft]	43.93	35.01	22.54	9.00	44.36	45.50
95th-Percentile Queue Length [veh]	3.16	2.52	1.62	0.65	3.19	3.28
95th-Percentile Queue Length [ft]	79.07	63.01	40.56	16.20	79.84	81.90

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	14.24	13.80	15.21	4.70	13.76	14.02
Movement LOS	B	B	B	A	B	B
d_A, Approach Delay [s/veh]	14.04		9.49		13.80	
Approach LOS	B		A		B	
d_I, Intersection Delay [s/veh]	12.34					
Intersection LOS	B					
Intersection V/C	0.603					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	2.323	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.132	4.630	4.613
Bicycle LOS	D	E	E

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 2: Main Street & I-405 NB Off-Ramp

Control Type:	Signalized	Delay (sec / veh):	11.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.743

Intersection Setup

Name	Main Street			Main Street			I-405 NB Off-Ramp			I-405 NB Off-Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Main Street			Main Street			I-405 NB Off-Ramp			I-405 NB Off-Ramp		
Base Volume Input [veh/h]	21	674	0	0	1235	92	0	0	0	61	121	236
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	21	674	0	0	1235	92	0	0	0	61	121	236
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	169	0	0	309	23	0	0	0	15	30	59
Total Analysis Volume [veh/h]	21	674	0	0	1235	92	0	0	0	61	121	236
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	7	4	0	0	8	0	0	0	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	30	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	10	43	0	0	33	0	0	0	0	0	17	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	0	10	0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.5	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C		C	C
C, Cycle Length [s]	44	44	44	44		44	44
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	1	25	19	19		10	10
g / C, Green / Cycle	0.03	0.57	0.44	0.44		0.22	0.22
(v / s)_i Volume / Saturation Flow Rate	0.01	0.19	0.35	0.36		0.10	0.16
s, saturation flow rate [veh/h]	1781	3560	1870	1825		1839	1446
c, Capacity [veh/h]	47	2039	830	810		408	321
d1, Uniform Delay [s]	21.01	4.93	10.50	10.64		14.72	15.85
k, delay calibration	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	6.64	0.09	1.83	2.12		0.77	3.29
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.45	0.33	0.80	0.82		0.45	0.74
d, Delay for Lane Group [s/veh]	27.65	5.02	12.33	12.76		15.49	19.14
Lane Group LOS	C	A	B	B		B	B
Critical Lane Group	Yes	No	No	Yes		No	Yes
50th-Percentile Queue Length [veh]	0.28	0.98	4.40	4.50		1.41	2.14
50th-Percentile Queue Length [ft]	6.89	24.54	109.88	112.59		35.28	53.55
95th-Percentile Queue Length [veh]	0.50	1.77	7.83	7.98		2.54	3.86
95th-Percentile Queue Length [ft]	12.41	44.17	195.83	199.60		63.50	96.39

Movement, Approach, & Intersection Results

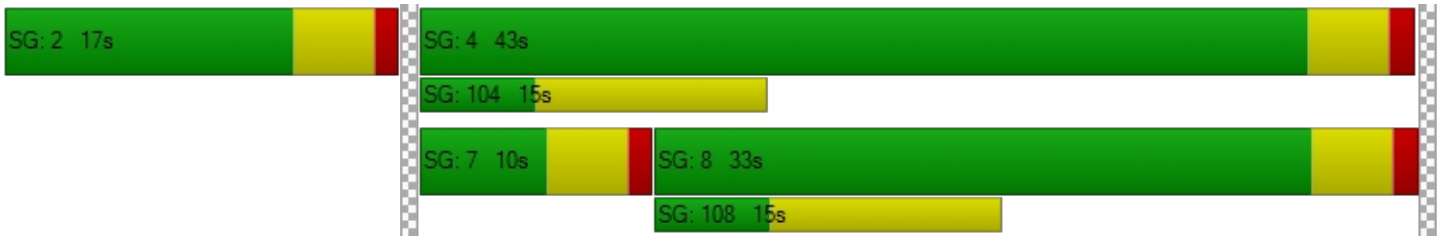
d_M, Delay for Movement [s/veh]	27.65	5.02	0.00	0.00	12.53	12.76	0.00	0.00	0.00	15.49	15.49	19.14
Movement LOS	C	A			B	B				B	B	B
d_A, Approach Delay [s/veh]	5.71			12.54			0.00			17.55		
Approach LOS	A			B			A			B		
d_I, Intersection Delay [s/veh]	11.45											
Intersection LOS	B											
Intersection V/C	0.743											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.810	1.899
Crosswalk LOS	F	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1283	950	0	417
d_b, Bicycle Delay [s]	3.85	8.27	30.00	18.80
l_b,int, Bicycle LOS Score for Intersection	2.133	2.654	4.132	1.904
Bicycle LOS	B	B	D	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Main Street & I-405 SB On Ramp

Control Type:	Signalized	Delay (sec / veh):	13.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.732

Intersection Setup

Name	Main Street			Main Street			I-405 SB On Ramp			I-405 SB On Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			30.00			30.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No			No			No				
Crosswalk		Yes			No			Yes			Yes	

Volumes

Name	Main Street			Main Street			I-405 SB On Ramp			I-405 SB On Ramp		
Base Volume Input [veh/h]	0	639	109	272	1025	0	61	276	42	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	639	109	272	1025	0	61	276	42	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	160	27	68	256	0	15	69	11	0	0	0
Total Analysis Volume [veh/h]	0	639	109	272	1025	0	61	276	42	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	4	0	3	8	0	0	6	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	5	0	5	5	0	0	5	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	0	30	0	0	0	0
Amber [s]	0.0	3.5	0.0	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	0	20	0	20	40	0	0	20	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	0	0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.5	0.0	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No			No				
Maximum Recall		No		No	No			No				
Pedestrian Recall		No		No	No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	L	C	
C, Cycle Length [s]	45	45	45	45	45	45	
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	
g_i, Effective Green Time [s]	13	13	9	26	10	10	
g / C, Green / Cycle	0.28	0.28	0.20	0.57	0.23	0.23	
(v / s)_i Volume / Saturation Flow Rate	0.20	0.21	0.15	0.29	0.03	0.17	
s, saturation flow rate [veh/h]	1870	1779	1781	3560	1781	1827	
c, Capacity [veh/h]	519	494	352	2047	402	413	
d1, Uniform Delay [s]	14.73	14.92	17.17	5.73	14.02	16.39	
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	1.90	2.40	3.64	0.19	0.17	3.07	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.72	0.76	0.77	0.50	0.15	0.77	
d, Delay for Lane Group [s/veh]	16.63	17.32	20.81	5.92	14.19	19.46	
Lane Group LOS	B	B	C	A	B	B	
Critical Lane Group	No	Yes	Yes	No	No	Yes	
50th-Percentile Queue Length [veh]	3.15	3.25	2.65	1.81	0.45	2.97	
50th-Percentile Queue Length [ft]	78.80	81.13	66.37	45.24	11.23	74.30	
95th-Percentile Queue Length [veh]	5.67	5.84	4.78	3.26	0.81	5.35	
95th-Percentile Queue Length [ft]	141.85	146.04	119.46	81.44	20.21	133.73	

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	16.92	17.32	20.81	5.92	0.00	14.19	19.46	19.46	0.00	0.00	0.00
Movement LOS		B	B	C	A		B	B	B			
d_A, Approach Delay [s/veh]	16.98			9.05			18.61			0.00		
Approach LOS	B			A			B			A		
d_I, Intersection Delay [s/veh]	12.99											
Intersection LOS	B											
Intersection V/C	0.732											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.554	0.000	1.880	2.045
Crosswalk LOS	B	F	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	517	1183	517	0
d_b, Bicycle Delay [s]	16.50	5.00	16.50	30.00
l_b,int, Bicycle LOS Score for Intersection	2.177	2.630	2.185	4.132
Bicycle LOS	B	B	B	D

Sequence

Ring 1	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Avalon Boulevard & SR-91 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	8.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.500

Intersection Setup

Name	Avalon Boulevard		Avalon Boulevard		SR-91 WB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name	Avalon Boulevard		Avalon Boulevard		SR-91 WB Ramps	
Base Volume Input [veh/h]	1180	217	163	1058	354	449
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1180	217	163	1058	354	449
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	295	54	41	265	89	112
Total Analysis Volume [veh/h]	1180	217	163	1058	354	449
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	4	0	0	8	2	0
Auxiliary Signal Groups						
Lead / Lag	-	-	-	-	Lead	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.5	0.0	0.0	3.5	3.5	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	34	0	0	34	26	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	2.5	2.5	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	C	R
C, Cycle Length [s]	38	38	38	38	38	38	38
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	19	19	19	19	10	10	10
g / C, Green / Cycle	0.51	0.51	0.51	0.51	0.26	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.23	0.14	0.18	0.21	0.16	0.16	0.16
s, saturation flow rate [veh/h]	5094	1589	923	5094	1781	1640	1589
c, Capacity [veh/h]	2585	807	476	2585	459	423	410
d1, Uniform Delay [s]	6.05	5.38	10.99	5.87	12.51	12.59	12.62
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.13	0.18	0.42	0.10	1.30	1.53	1.63
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.46	0.27	0.34	0.41	0.61	0.63	0.63
d, Delay for Lane Group [s/veh]	6.18	5.56	11.42	5.97	13.81	14.12	14.25
Lane Group LOS	A	A	B	A	B	B	B
Critical Lane Group	Yes	No	No	No	No	No	Yes
50th-Percentile Queue Length [veh]	1.22	0.63	0.46	1.06	1.81	1.76	1.74
50th-Percentile Queue Length [ft]	30.60	15.65	11.60	26.58	45.34	43.97	43.46
95th-Percentile Queue Length [veh]	2.20	1.13	0.84	1.91	3.26	3.17	3.13
95th-Percentile Queue Length [ft]	55.09	28.16	20.89	47.84	81.62	79.14	78.23

Movement, Approach, & Intersection Results

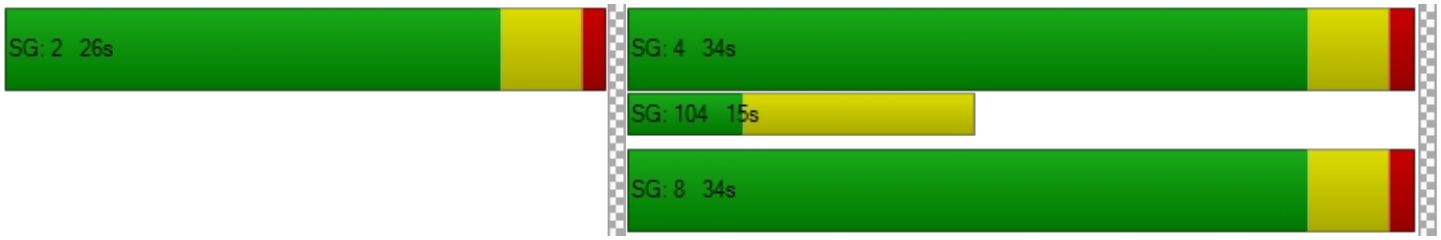
d_M, Delay for Movement [s/veh]	6.18	5.56	11.42	5.97	13.88	14.20
Movement LOS	A	A	B	A	B	B
d_A, Approach Delay [s/veh]	6.08		6.70		14.05	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	8.17					
Intersection LOS	A					
Intersection V/C	0.500					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.743
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.901	4.804	5.457
Bicycle LOS	E	E	F

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Avalon Boulevard & I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	7.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.546

Intersection Setup

Name	Avalon Boulevard			Avalon Boulevard			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			30.00			30.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No			No						No	
Crosswalk		No			No			Yes			Yes	

Volumes

Name	Avalon Boulevard			Avalon Boulevard			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	301	1080	0	0	1333	481	0	0	0	82	2	386
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	301	1080	0	0	1333	481	0	0	0	82	2	386
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	75	270	0	0	333	120	0	0	0	21	1	97
Total Analysis Volume [veh/h]	301	1080	0	0	1333	481	0	0	0	82	2	386
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss	Permiss	Permiss	Unsigna
Signal group	7	4	0	0	8	0	0	0	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	30	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	15	50	0	0	35	0	0	0	0	0	10	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	0	10	0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.5	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C		L	C
C, Cycle Length [s]	38	38	38		38	38
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	6	26	16		3	3
g / C, Green / Cycle	0.15	0.68	0.41		0.08	0.08
(v / s)_i Volume / Saturation Flow Rate	0.09	0.30	0.26		0.02	0.02
s, saturation flow rate [veh/h]	3459	3560	5094		1781	1785
c, Capacity [veh/h]	523	2432	2104		140	140
d1, Uniform Delay [s]	14.91	2.72	8.82		16.42	16.42
k, delay calibration	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	1.01	0.13	0.32		1.19	1.18
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.58	0.44	0.63		0.30	0.30
d, Delay for Lane Group [s/veh]	15.91	2.85	9.14		17.61	17.61
Lane Group LOS	B	A	A		B	B
Critical Lane Group	Yes	No	Yes		Yes	No
50th-Percentile Queue Length [veh]	1.06	0.38	2.03		0.34	0.34
50th-Percentile Queue Length [ft]	26.56	9.50	50.63		8.42	8.42
95th-Percentile Queue Length [veh]	1.91	0.68	3.65		0.61	0.61
95th-Percentile Queue Length [ft]	47.81	17.10	91.13		15.16	15.16

Movement, Approach, & Intersection Results

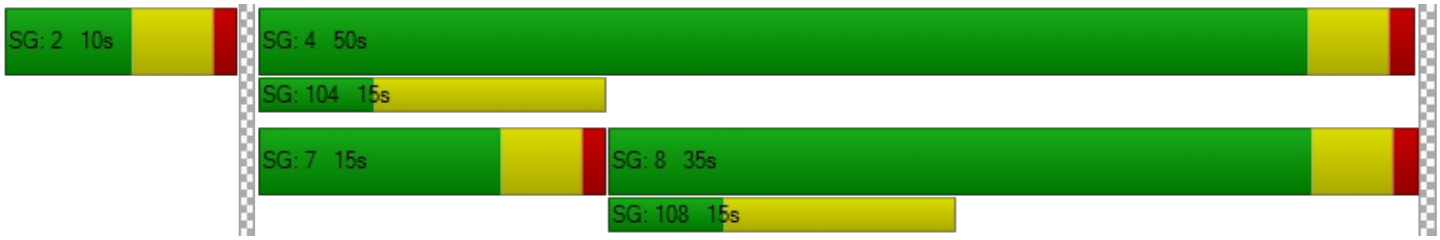
d_M, Delay for Movement [s/veh]	15.91	2.85	0.00	0.00	9.14	0.00	0.00	0.00	0.00	17.61	17.61	0.00
Movement LOS	B	A			A					B	B	
d_A, Approach Delay [s/veh]	5.70			9.14			0.00			17.61		
Approach LOS	A			A			A			B		
d_I, Intersection Delay [s/veh]	7.69											
Intersection LOS	A											
Intersection V/C	0.546											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.843	1.948
Crosswalk LOS	F	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1517	1017	0	183
d_b, Bicycle Delay [s]	1.75	7.25	30.00	24.75
l_b,int, Bicycle LOS Score for Intersection	2.699	2.293	4.132	1.698
Bicycle LOS	B	B	D	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 16: Avalon Boulevard & I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	7.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.680

Intersection Setup

Name	Avalon Boulevard			Avalon Boulevard			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Avalon Boulevard			Avalon Boulevard			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	0	1101	181	0	1055	364	245	169	345	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1101	181	0	1055	364	245	169	345	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	275	45	0	264	91	61	42	86	0	0	0
Total Analysis Volume [veh/h]	0	1101	181	0	1055	364	245	169	345	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss
Signal group	7	4	0	0	8	0	0	6	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	5	0	0	0	0
Maximum Green [s]	30	30	0	0	30	0	0	30	0	0	0	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	10	40	0	0	30	0	0	20	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	0	0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Minimum Recall	No	No			No			No				
Maximum Recall	No	No			No			No				
Pedestrian Recall	No	No			No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	C	
C, Cycle Length [s]	32	32	32	32	32	32	
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	
g_i, Effective Green Time [s]	0	18	18	13	5	5	
g / C, Green / Cycle	0.00	0.56	0.56	0.42	0.16	0.16	
(v / s)_i Volume / Saturation Flow Rate	0.00	0.35	0.35	0.30	0.07	0.05	
s, saturation flow rate [veh/h]	1781	1870	1779	3560	3459	3560	
c, Capacity [veh/h]	1	1048	997	1492	544	560	
d1, Uniform Delay [s]	0.00	4.74	4.75	7.65	12.19	11.89	
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.00	0.62	0.66	0.63	0.59	0.30	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.00	0.63	0.63	0.71	0.45	0.30	
d, Delay for Lane Group [s/veh]	0.00	5.36	5.41	8.27	12.77	12.19	
Lane Group LOS	A	A	A	A	B	B	
Critical Lane Group	No	No	Yes	No	Yes	No	
50th-Percentile Queue Length [veh]	0.00	1.19	1.15	1.82	0.64	0.43	
50th-Percentile Queue Length [ft]	0.00	29.64	28.66	45.40	16.12	10.69	
95th-Percentile Queue Length [veh]	0.00	2.13	2.06	3.27	1.16	0.77	
95th-Percentile Queue Length [ft]	0.00	53.35	51.59	81.72	29.01	19.23	

Movement, Approach, & Intersection Results

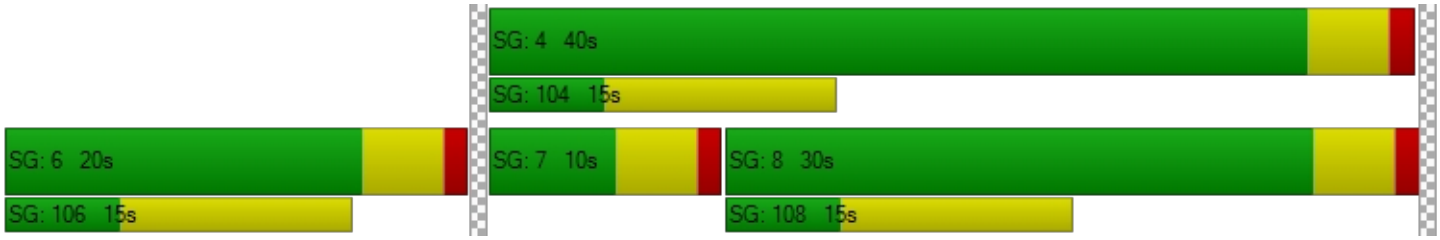
d_M, Delay for Movement [s/veh]	0.00	5.38	5.41	0.00	8.27	0.00	12.77	12.19	0.00	0.00	0.00	0.00
Movement LOS	A	A	A		A		B	B				
d_A, Approach Delay [s/veh]	5.38			8.27			12.54			0.00		
Approach LOS	A			A			B			A		
d_I, Intersection Delay [s/veh]	7.57											
Intersection LOS	A											
Intersection V/C	0.680											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.736	0.000	2.501	1.866
Crosswalk LOS	B	F	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1183	850	517	0
d_b, Bicycle Delay [s]	5.00	9.92	16.50	30.00
l_b,int, Bicycle LOS Score for Intersection	2.617	2.430	1.901	4.132
Bicycle LOS	B	B	A	D

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 17: Main Street & SR 91 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	12.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.665

Intersection Setup

Name	Main Street			Main Street			SR-91 WB Ramps			SR-91 WB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			No			Yes		

Volumes

Name	Main Street			Main Street			SR-91 WB Ramps			SR-91 WB Ramps		
Base Volume Input [veh/h]	1	574	98	108	726	0	0	0	0	240	0	326
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	574	98	108	726	0	0	0	0	240	0	326
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	144	25	27	182	0	0	0	0	60	0	82
Total Analysis Volume [veh/h]	1	574	98	108	726	0	0	0	0	240	0	326
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	7	4	0	3	8	0	0	0	0	2	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	30	30	0	0	0	0	30	0	0
Amber [s]	3.5	3.5	0.0	3.5	3.5	0.0	0.0	0.0	0.0	3.5	0.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	10	24	0	11	25	0	0	0	0	25	0	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	5	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	10	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	2.5	2.5	0.0	0.0	0.0	0.0	2.5	0.0	0.0
Minimum Recall	No	No		No	No					No		
Maximum Recall	No	No		No	No					No		
Pedestrian Recall	No	No		No	No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C		L	R
C, Cycle Length [s]	37	37	37	37	37		37	37
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	0	10	10	3	13		10	10
g / C, Green / Cycle	0.00	0.26	0.26	0.09	0.35		0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.00	0.18	0.18	0.06	0.20		0.13	0.21
s, saturation flow rate [veh/h]	1781	1870	1776	1781	3560		1781	1589
c, Capacity [veh/h]	3	496	471	163	1265		501	447
d1, Uniform Delay [s]	18.60	12.33	12.35	16.39	9.74		11.14	12.12
k, delay calibration	0.11	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	60.26	1.75	1.86	4.54	0.41		0.71	2.30
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.35	0.69	0.70	0.66	0.57		0.48	0.73
d, Delay for Lane Group [s/veh]	78.86	14.08	14.21	20.93	10.15		11.85	14.43
Lane Group LOS	E	B	B	C	B		B	B
Critical Lane Group	No	No	Yes	Yes	No		No	Yes
50th-Percentile Queue Length [veh]	0.06	2.22	2.14	0.95	1.79		1.36	2.15
50th-Percentile Queue Length [ft]	1.39	55.55	53.44	23.81	44.87		33.97	53.70
95th-Percentile Queue Length [veh]	0.10	4.00	3.85	1.71	3.23		2.45	3.87
95th-Percentile Queue Length [ft]	2.49	99.99	96.18	42.86	80.76		61.14	96.65

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	78.86	14.13	14.21	20.93	10.15	0.00	0.00	0.00	0.00	11.85	0.00	14.43
Movement LOS	E	B	B	C	B					B		B
d_A, Approach Delay [s/veh]	14.24			11.55			0.00			13.33		
Approach LOS	B			B			A			B		
d_I, Intersection Delay [s/veh]	12.91											
Intersection LOS	B											
Intersection V/C	0.665											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.172
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	650	683	0	0
d_b, Bicycle Delay [s]	13.67	13.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	2.115	2.248	4.132	4.132
Bicycle LOS	B	B	D	D

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 21: I-110 NB On-Ramp & 190th Street

Control Type:	Signalized	Delay (sec / veh):	7.5
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.543

Intersection Setup

Name	I-110 NB On Ramp			I-110 NB On Ramp			190th Street			190th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	No			Yes			No			No		

Volumes

Name	I-110 NB On Ramp			I-110 NB On Ramp			190th Street			190th Street		
Base Volume Input [veh/h]	0	0	0	0	0	0	435	1188	0	0	676	241
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	435	1188	0	0	676	241
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	109	297	0	0	169	60
Total Analysis Volume [veh/h]	0	0	0	0	0	0	435	1188	0	0	676	241
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	0	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	0	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	30	30	0
Amber [s]	0.0	3.5	0.0	0.0	0.0	0.0	3.5	3.5	0.0	3.5	3.5	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	28	0	0	0	0	12	22	0	10	20	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.5	0.0	0.0	0.0	0.0	2.5	2.5	0.0	2.5	2.5	0.0
Minimum Recall		No					No	No		No	No	
Maximum Recall		No					No	No		No	No	
Pedestrian Recall		No					No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C		L	C	C	L	C	R
C, Cycle Length [s]	29		29	29	29	29	29	29
L, Total Lost Time per Cycle [s]	4.50		4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50		2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	0		6	15	15	0	9	9
g / C, Green / Cycle	0.00		0.22	0.53	0.53	0.00	0.31	0.31
(v / s)_i Volume / Saturation Flow Rate	0.00		0.13	0.32	0.32	0.00	0.19	0.15
s, saturation flow rate [veh/h]	1870		3459	1870	1870	1781	3560	1589
c, Capacity [veh/h]	0		762	999	999	0	1119	499
d1, Uniform Delay [s]	0.00		10.09	4.61	4.61	0.00	8.42	8.04
k, delay calibration	0.11		0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00		0.68	0.57	0.57	0.00	0.53	0.72
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00		0.57	0.59	0.59	0.00	0.60	0.48
d, Delay for Lane Group [s/veh]	0.00		10.77	5.18	5.18	0.00	8.95	8.77
Lane Group LOS	A		B	A	A	A	A	A
Critical Lane Group	No		No	Yes	No	No	No	No
50th-Percentile Queue Length [veh]	0.00		0.91	0.91	0.91	0.00	1.18	0.85
50th-Percentile Queue Length [ft]	0.00		22.86	22.84	22.84	0.00	29.52	21.21
95th-Percentile Queue Length [veh]	0.00		1.65	1.64	1.64	0.00	2.13	1.53
95th-Percentile Queue Length [ft]	0.00		41.16	41.10	41.10	0.00	53.13	38.18

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00	10.77	5.18	5.18	0.00	8.95	8.77
Movement LOS	A	A	A				B	A	A	A	A	A
d_A, Approach Delay [s/veh]	0.00			0.00			6.68			8.90		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	7.48											
Intersection LOS	A											
Intersection V/C	0.543											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	21.68	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	2.025	0.000	0.000
Crosswalk LOS	F	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	783	0	583	517
d_b, Bicycle Delay [s]	11.10	30.00	15.05	16.50
l_b,int, Bicycle LOS Score for Intersection	1.560	4.132	2.899	2.316
Bicycle LOS	A	D	C	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 22: I-110 SB Off-Ramp & 190th Street

Control Type:	Signalized	Delay (sec / veh):	12.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.795

Intersection Setup

Name	I-110 SB Off-Ramp		190th Street		190th Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	I-110 SB Off-Ramp		190th Street		190th Street	
Base Volume Input [veh/h]	309	461	0	1323	670	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	309	461	0	1323	670	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	77	115	0	331	168	0
Total Analysis Volume [veh/h]	309	461	0	1323	670	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	8	0	0	6	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.5	0.0	0.0	3.5	3.5	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	30	0	0	30	30	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	2.5	2.5	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	48	48	48	48
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	17	17	22	22
g / C, Green / Cycle	0.35	0.35	0.46	0.46
(v / s)_i Volume / Saturation Flow Rate	0.17	0.29	0.37	0.13
s, saturation flow rate [veh/h]	1781	1589	3560	5094
c, Capacity [veh/h]	625	558	1641	2348
d1, Uniform Delay [s]	12.20	14.20	11.08	8.01
k, delay calibration	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.61	3.18	0.97	0.07
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.49	0.83	0.81	0.29
d, Delay for Lane Group [s/veh]	12.81	17.38	12.05	8.08
Lane Group LOS	B	B	B	A
Critical Lane Group	No	Yes	Yes	No
50th-Percentile Queue Length [veh]	2.25	4.21	4.72	1.11
50th-Percentile Queue Length [ft]	56.19	105.33	117.96	27.82
95th-Percentile Queue Length [veh]	4.05	7.58	8.28	2.00
95th-Percentile Queue Length [ft]	101.14	189.49	207.02	50.08

Movement, Approach, & Intersection Results

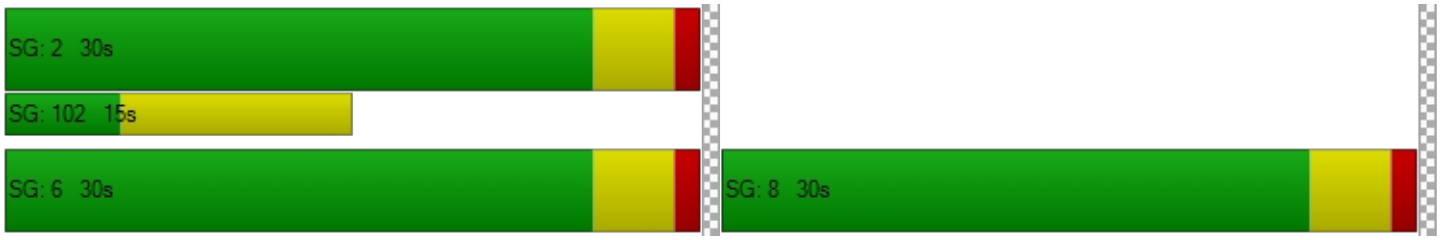
d_M, Delay for Movement [s/veh]	12.81	17.38	0.00	12.05	8.08	0.00
Movement LOS	B	B		B	A	
d_A, Approach Delay [s/veh]	15.54		12.05		8.08	
Approach LOS	B		B		A	
d_I, Intersection Delay [s/veh]	12.06					
Intersection LOS	B					
Intersection V/C	0.795					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.071	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
I_b,int, Bicycle LOS Score for Intersection	4.132	5.224	4.501
Bicycle LOS	D	F	E

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	All-way stop	Delay (sec / veh):	81.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.310

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	61	534	634	169	296	102
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	61	534	634	169	296	102
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	134	159	42	74	26
Total Analysis Volume [veh/h]	61	534	634	169	296	102
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	513	569	634	520	444	481
Degree of Utilization, x	0.12	0.94	1.31	0.33	0.45	0.41

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.40	12.11	27.42	1.40	2.27	2.01
95th-Percentile Queue Length [ft]	10.06	302.73	685.57	35.02	56.71	50.23
Approach Delay [s/veh]	44.66		141.73		16.32	
Approach LOS	E		F		C	
Intersection Delay [s/veh]	81.78					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 27: Figueroa Street & I-110 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	15.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.709

Intersection Setup

Name	Figueroa Street		Figueroa Street		I-110 NB Ramps	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name	Figueroa Street		Figueroa Street		I-110 NB Ramps	
Base Volume Input [veh/h]	499	420	888	147	357	138
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	499	420	888	147	357	138
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	125	105	222	37	89	35
Total Analysis Volume [veh/h]	499	420	888	147	357	138
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	7	4	8	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	5	5	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.5	3.5	3.5	0.0	3.5	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	17	43	26	0	17	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	10	10	0	10	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	2.5	0.0	2.5	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	C
C, Cycle Length [s]	50	50	50	50	50	50
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	10	31	16	16	10	10
g / C, Green / Cycle	0.20	0.62	0.32	0.32	0.20	0.20
(v / s)_i Volume / Saturation Flow Rate	0.14	0.12	0.25	0.09	0.14	0.14
s, saturation flow rate [veh/h]	3459	3560	3560	1589	1781	1665
c, Capacity [veh/h]	707	2204	1153	515	356	332
d1, Uniform Delay [s]	18.34	4.08	15.12	12.50	18.56	18.56
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.30	0.04	1.12	0.30	2.75	2.93
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.71	0.19	0.77	0.29	0.72	0.72
d, Delay for Lane Group [s/veh]	19.65	4.12	16.24	12.80	21.30	21.49
Lane Group LOS	B	A	B	B	C	C
Critical Lane Group	Yes	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh]	2.48	0.57	3.98	1.08	2.70	2.54
50th-Percentile Queue Length [ft]	61.94	14.36	99.42	27.08	67.46	63.51
95th-Percentile Queue Length [veh]	4.46	1.03	7.16	1.95	4.86	4.57
95th-Percentile Queue Length [ft]	111.49	25.84	178.95	48.74	121.43	114.32

Movement, Approach, & Intersection Results

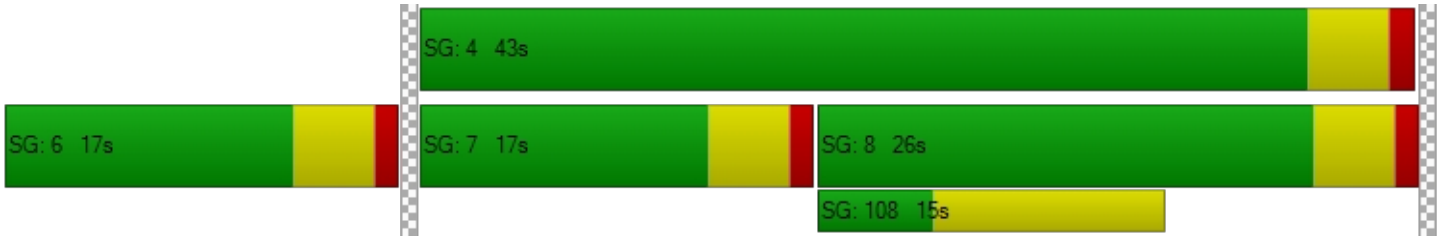
d_M, Delay for Movement [s/veh]	19.65	4.12	16.24	12.80	21.36	21.49
Movement LOS	B	A	B	B	C	C
d_A, Approach Delay [s/veh]	12.55		15.75		21.39	
Approach LOS	B		B		C	
d_I, Intersection Delay [s/veh]	15.69					
Intersection LOS	B					
Intersection V/C	0.709					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.390
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.891	4.986	4.949
Bicycle LOS	E	E	E

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 28: SR 91 EB Ramps & Albertoni Street

Control Type:	Signalized	Delay (sec / veh):	11.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.696

Intersection Setup

Name	SR 91 EB Ramps		Albertoni Street		Albertoni Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	SR 91 EB Ramps		Albertoni Street		Albertoni Street	
Base Volume Input [veh/h]	426	304	214	815	352	62
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	426	304	214	815	352	62
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	107	76	54	204	88	16
Total Analysis Volume [veh/h]	426	304	214	815	352	62
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal group	8	0	1	6	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.5	0.0	3.5	3.5	3.5	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	29	0	11	31	20	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	2.5	2.5	2.5	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	L	C	C	C
C, Cycle Length [s]	37	37	37	37	37	37
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	12	12	4	16	7	7
g / C, Green / Cycle	0.32	0.32	0.12	0.43	0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.24	0.19	0.06	0.23	0.11	0.12
s, saturation flow rate [veh/h]	1781	1589	3459	3560	1870	1776
c, Capacity [veh/h]	577	515	422	1536	350	332
d1, Uniform Delay [s]	11.06	10.40	15.12	7.71	13.67	13.76
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.87	1.08	0.94	0.29	1.59	1.91
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.74	0.59	0.51	0.53	0.59	0.62
d, Delay for Lane Group [s/veh]	12.93	11.48	16.06	8.00	15.26	15.67
Lane Group LOS	B	B	B	A	B	B
Critical Lane Group	Yes	No	No	Yes	No	No
50th-Percentile Queue Length [veh]	2.54	1.66	0.74	1.59	1.41	1.44
50th-Percentile Queue Length [ft]	63.54	41.48	18.62	39.84	35.24	35.98
95th-Percentile Queue Length [veh]	4.57	2.99	1.34	2.87	2.54	2.59
95th-Percentile Queue Length [ft]	114.36	74.67	33.52	71.70	63.44	64.77

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	12.93	11.48	16.06	8.00	15.43	15.67
Movement LOS	B	B	B	A	B	B
d_A, Approach Delay [s/veh]	12.33		9.67		15.47	
Approach LOS	B		A		B	
d_I, Intersection Delay [s/veh]	11.67					
Intersection LOS	B					
Intersection V/C	0.696					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	2.357	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.132	4.981	4.474
Bicycle LOS	D	E	E

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 2: Main Street & I-405 NB Off-Ramp

Control Type:	Signalized	Delay (sec / veh):	11.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.656

Intersection Setup

Name	Main Street			Main Street			I-405 NB Off-Ramp			I-405 NB Off-Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Main Street			Main Street			I-405 NB Off-Ramp			I-405 NB Off-Ramp		
Base Volume Input [veh/h]	28	679	0	0	747	70	0	0	0	87	324	239
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	28	679	0	0	747	70	0	0	0	87	324	239
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	170	0	0	187	18	0	0	0	22	81	60
Total Analysis Volume [veh/h]	28	679	0	0	747	70	0	0	0	87	324	239
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	7	4	0	0	8	0	0	0	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	30	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	9	35	0	0	26	0	0	0	0	0	25	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	0	10	0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.5	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C		C	C
C, Cycle Length [s]	36	36	36	36		36	36
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	1	17	11	11		10	10
g / C, Green / Cycle	0.03	0.47	0.31	0.31		0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.02	0.19	0.22	0.23		0.19	0.20
s, saturation flow rate [veh/h]	1781	3560	1870	1815		1848	1487
c, Capacity [veh/h]	62	1680	585	568		516	415
d1, Uniform Delay [s]	17.12	6.23	10.93	11.02		11.66	11.69
k, delay calibration	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	5.06	0.16	1.52	1.73		1.69	2.18
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.45	0.40	0.70	0.72		0.69	0.70
d, Delay for Lane Group [s/veh]	22.18	6.39	12.45	12.76		13.35	13.87
Lane Group LOS	C	A	B	B		B	B
Critical Lane Group	Yes	No	No	Yes		No	Yes
50th-Percentile Queue Length [veh]	0.28	1.04	2.34	2.38		2.17	1.83
50th-Percentile Queue Length [ft]	7.00	26.11	58.43	59.53		54.17	45.63
95th-Percentile Queue Length [veh]	0.50	1.88	4.21	4.29		3.90	3.29
95th-Percentile Queue Length [ft]	12.59	47.01	105.17	107.15		97.51	82.13

Movement, Approach, & Intersection Results

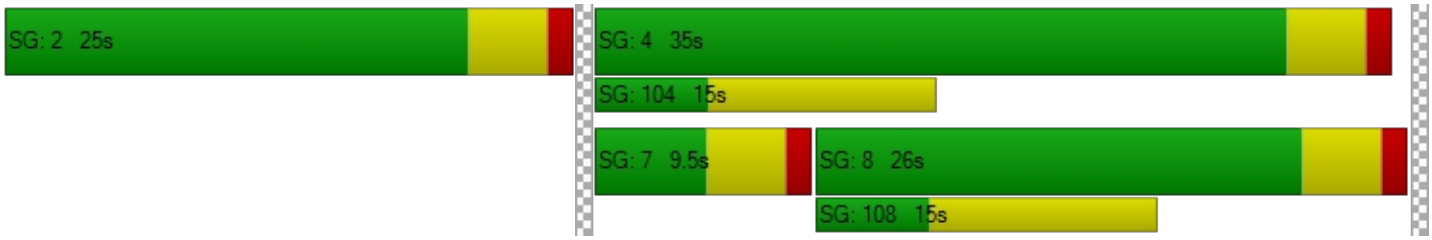
d_M, Delay for Movement [s/veh]	22.18	6.39	0.00	0.00	12.59	12.76	0.00	0.00	0.00	13.35	13.43	13.87
Movement LOS	C	A			B	B				B	B	B
d_A, Approach Delay [s/veh]	7.01			12.61			0.00			13.58		
Approach LOS	A			B			A			B		
d_I, Intersection Delay [s/veh]	11.08											
Intersection LOS	B											
Intersection V/C	0.656											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.901	2.012
Crosswalk LOS	F	F	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1017	717	0	683
d_b, Bicycle Delay [s]	7.25	12.35	30.00	13.00
l_b,int, Bicycle LOS Score for Intersection	2.143	2.234	4.132	2.096
Bicycle LOS	B	B	D	B

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Main Street & I-405 SB On Ramp

Control Type:	Signalized	Delay (sec / veh):	7.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.559

Intersection Setup

Name	Main Street			Main Street			I-405 SB On Ramp			I-405 SB On Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			30.00			30.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No			No			No				
Crosswalk		Yes			No			Yes			Yes	

Volumes

Name	Main Street			Main Street			I-405 SB On Ramp			I-405 SB On Ramp		
Base Volume Input [veh/h]	0	621	52	152	740	0	29	71	21	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	621	52	152	740	0	29	71	21	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	155	13	38	185	0	7	18	5	0	0	0
Total Analysis Volume [veh/h]	0	621	52	152	740	0	29	71	21	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	4	0	3	8	0	0	6	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	5	0	5	5	0	0	5	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	0	30	0	0	0	0
Amber [s]	0.0	3.5	0.0	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	0	19	0	22	41	0	0	19	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	0	0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.5	0.0	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No			No				
Maximum Recall		No		No	No			No				
Pedestrian Recall		No		No	No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	L	C	
C, Cycle Length [s]	28	28	28	28	28	28	
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	
g_i, Effective Green Time [s]	8	8	4	16	3	3	
g / C, Green / Cycle	0.29	0.29	0.12	0.57	0.11	0.11	
(v / s)_i Volume / Saturation Flow Rate	0.18	0.18	0.09	0.21	0.02	0.05	
s, saturation flow rate [veh/h]	1870	1820	1781	3560	1781	1798	
c, Capacity [veh/h]	540	526	222	2038	196	198	
d1, Uniform Delay [s]	8.74	8.79	11.86	3.27	11.41	11.83	
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	1.18	1.31	3.68	0.11	0.34	1.70	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.62	0.64	0.68	0.36	0.15	0.47	
d, Delay for Lane Group [s/veh]	9.92	10.10	15.54	3.38	11.75	13.53	
Lane Group LOS	A	B	B	A	B	B	
Critical Lane Group	No	Yes	Yes	No	No	Yes	
50th-Percentile Queue Length [veh]	1.29	1.31	0.89	0.25	0.14	0.49	
50th-Percentile Queue Length [ft]	32.15	32.65	22.24	6.32	3.49	12.28	
95th-Percentile Queue Length [veh]	2.31	2.35	1.60	0.46	0.25	0.88	
95th-Percentile Queue Length [ft]	57.87	58.77	40.04	11.38	6.29	22.10	

Movement, Approach, & Intersection Results

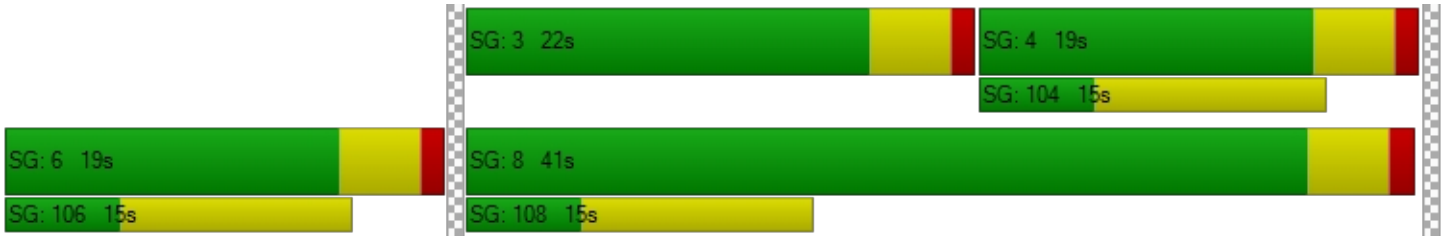
d_M, Delay for Movement [s/veh]	0.00	10.01	10.10	15.54	3.38	0.00	11.75	13.53	13.53	0.00	0.00	0.00
Movement LOS		B	B	B	A		B	B	B			
d_A, Approach Delay [s/veh]		10.01			5.45			13.10			0.00	
Approach LOS		B			A			B			A	
d_I, Intersection Delay [s/veh]	7.82											
Intersection LOS	A											
Intersection V/C	0.559											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.461	0.000	1.755	1.672
Crosswalk LOS	B	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	483	1217	483	0
d_b, Bicycle Delay [s]	17.25	4.60	17.25	30.00
l_b,int, Bicycle LOS Score for Intersection	2.115	2.296	1.759	4.132
Bicycle LOS	B	B	A	D

Sequence

Ring 1	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Avalon Boulevard & SR-91 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	8.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.522

Intersection Setup

Name	Avalon Boulevard		Avalon Boulevard		SR-91 WB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name	Avalon Boulevard		Avalon Boulevard		SR-91 WB Ramps	
Base Volume Input [veh/h]	915	165	177	1092	337	600
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	915	165	177	1092	337	600
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	229	41	44	273	84	150
Total Analysis Volume [veh/h]	915	165	177	1092	337	600
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	4	0	0	8	2	0
Auxiliary Signal Groups						
Lead / Lag	-	-	-	-	Lead	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.5	0.0	0.0	3.5	3.5	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	30	0	0	30	30	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	2.5	2.5	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	C	R
C, Cycle Length [s]	37	37	37	37	37	37	37
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	17	17	17	17	11	11	11
g / C, Green / Cycle	0.46	0.46	0.46	0.46	0.30	0.30	0.30
(v / s)_i Volume / Saturation Flow Rate	0.18	0.10	0.15	0.21	0.18	0.19	0.20
s, saturation flow rate [veh/h]	5094	1589	1185	5094	1781	1601	1589
c, Capacity [veh/h]	2347	732	541	2347	531	477	474
d1, Uniform Delay [s]	6.61	6.05	10.93	6.90	11.17	11.40	11.42
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.11	0.15	0.35	0.14	1.07	1.51	1.55
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.39	0.23	0.33	0.47	0.60	0.65	0.66
d, Delay for Lane Group [s/veh]	6.72	6.21	11.28	7.05	12.24	12.91	12.96
Lane Group LOS	A	A	B	A	B	B	B
Critical Lane Group	No	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh]	1.02	0.52	0.48	1.27	1.85	1.90	1.90
50th-Percentile Queue Length [ft]	25.45	13.10	12.11	31.78	46.17	47.39	47.48
95th-Percentile Queue Length [veh]	1.83	0.94	0.87	2.29	3.32	3.41	3.42
95th-Percentile Queue Length [ft]	45.81	23.58	21.81	57.21	83.11	85.29	85.47

Movement, Approach, & Intersection Results

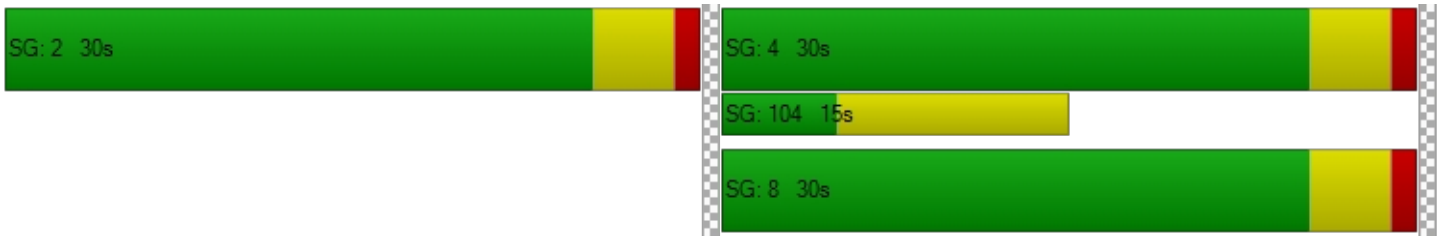
d_M, Delay for Movement [s/veh]	6.72	6.21	11.28	7.05	12.29	12.94
Movement LOS	A	A	B	A	B	B
d_A, Approach Delay [s/veh]	6.64		7.64		12.70	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	8.75					
Intersection LOS	A					
Intersection V/C	0.522					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.782
Crosswalk LOS	F	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.726	4.830	5.678
Bicycle LOS	E	E	F

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Avalon Boulevard & I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	7.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.552

Intersection Setup

Name	Avalon Boulevard			Avalon Boulevard			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			30.00			30.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No			No						No	
Crosswalk		No			No			Yes			Yes	

Volumes

Name	Avalon Boulevard			Avalon Boulevard			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	414	1119	0	0	772	259	0	0	0	66	0	423
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	414	1119	0	0	772	259	0	0	0	66	0	423
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	104	280	0	0	193	65	0	0	0	17	0	106
Total Analysis Volume [veh/h]	414	1119	0	0	772	259	0	0	0	66	0	423
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss	Permiss	Permiss	Unsigna
Signal group	7	4	0	0	8	0	0	0	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	30	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	14	33	0	0	19	0	0	0	0	0	27	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	0	10	0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.5	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C		L	C
C, Cycle Length [s]	30	30	30		30	30
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	6	19	8		2	2
g / C, Green / Cycle	0.21	0.63	0.27		0.07	0.07
(v / s)_i Volume / Saturation Flow Rate	0.12	0.31	0.15		0.02	0.02
s, saturation flow rate [veh/h]	3459	3560	5094		1781	1781
c, Capacity [veh/h]	722	2250	1400		128	128
d1, Uniform Delay [s]	10.79	3.00	9.41		13.33	13.33
k, delay calibration	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	0.72	0.17	0.34		1.06	1.06
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.57	0.50	0.55		0.26	0.26
d, Delay for Lane Group [s/veh]	11.51	3.17	9.75		14.39	14.39
Lane Group LOS	B	A	A		B	B
Critical Lane Group	No	Yes	No		Yes	No
50th-Percentile Queue Length [veh]	0.96	0.23	1.02		0.20	0.20
50th-Percentile Queue Length [ft]	23.97	5.70	25.48		5.08	5.08
95th-Percentile Queue Length [veh]	1.73	0.41	1.83		0.37	0.37
95th-Percentile Queue Length [ft]	43.14	10.26	45.86		9.14	9.14

Movement, Approach, & Intersection Results

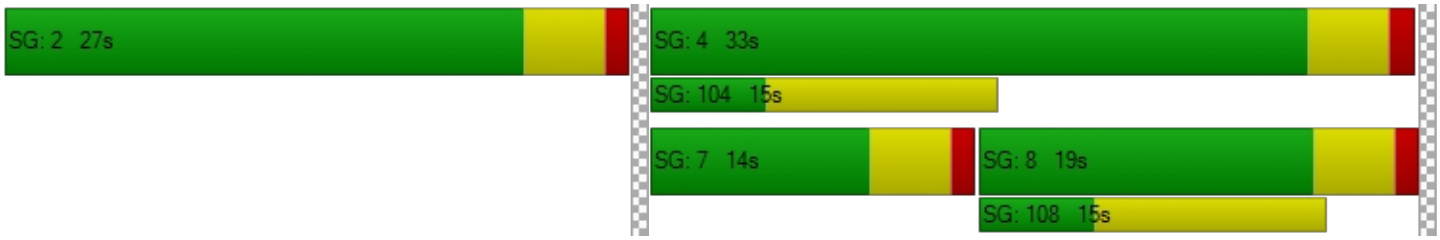
d_M, Delay for Movement [s/veh]	11.51	3.17	0.00	0.00	9.75	0.00	0.00	0.00	0.00	14.39	14.39	0.00
Movement LOS	B	A			A					B	B	
d_A, Approach Delay [s/veh]	5.42			9.75			0.00			14.39		
Approach LOS	A			A			A			B		
d_I, Intersection Delay [s/veh]	7.08											
Intersection LOS	A											
Intersection V/C	0.552											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.897	1.942
Crosswalk LOS	F	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	950	483	0	750
d_b, Bicycle Delay [s]	8.27	17.25	30.00	11.72
l_b,int, Bicycle LOS Score for Intersection	2.824	1.984	4.132	1.669
Bicycle LOS	C	A	D	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 16: Avalon Boulevard & I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	8.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.779

Intersection Setup

Name	Avalon Boulevard			Avalon Boulevard			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			30.00			30.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No			No			No				
Crosswalk		Yes			No			Yes			Yes	

Volumes

Name	Avalon Boulevard			Avalon Boulevard			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	0	1015	100	0	570	271	444	13	554	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1015	100	0	570	271	444	13	554	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	254	25	0	143	68	111	3	139	0	0	0
Total Analysis Volume [veh/h]	0	1015	100	0	570	271	444	13	554	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss
Signal group	7	4	0	0	8	0	0	6	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	5	0	0	0	0
Maximum Green [s]	30	30	0	0	30	0	0	30	0	0	0	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	9	28	0	0	19	0	0	32	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	0	0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Minimum Recall	No	No			No			No				
Maximum Recall	No	No			No			No				
Pedestrian Recall	No	No			No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	C	
C, Cycle Length [s]	27	27	27	27	27	27	
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	
g_i, Effective Green Time [s]	0	12	12	7	6	6	
g / C, Green / Cycle	0.00	0.43	0.43	0.27	0.23	0.23	
(v / s)_i Volume / Saturation Flow Rate	0.00	0.30	0.30	0.16	0.13	0.00	
s, saturation flow rate [veh/h]	1781	1870	1812	3560	3459	3560	
c, Capacity [veh/h]	1	812	787	952	805	829	
d1, Uniform Delay [s]	0.00	6.20	6.21	8.64	9.13	7.99	
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.00	1.09	1.13	0.61	0.59	0.01	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.00	0.70	0.70	0.60	0.55	0.02	
d, Delay for Lane Group [s/veh]	0.00	7.30	7.34	9.25	9.72	7.99	
Lane Group LOS	A	A	A	A	A	A	
Critical Lane Group	No	No	Yes	No	Yes	No	
50th-Percentile Queue Length [veh]	0.00	1.34	1.31	0.96	0.79	0.02	
50th-Percentile Queue Length [ft]	0.00	33.51	32.70	24.06	19.81	0.49	
95th-Percentile Queue Length [veh]	0.00	2.41	2.35	1.73	1.43	0.04	
95th-Percentile Queue Length [ft]	0.00	60.32	58.85	43.30	35.66	0.88	

Movement, Approach, & Intersection Results

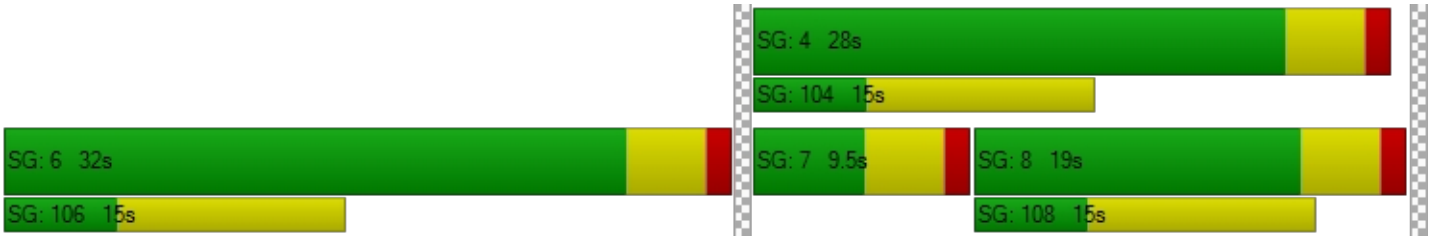
d_M, Delay for Movement [s/veh]	0.00	7.31	7.34	0.00	9.25	0.00	9.72	7.99	0.00	0.00	0.00	0.00
Movement LOS	A	A	A		A		A	A				
d_A, Approach Delay [s/veh]	7.32			9.25			9.67			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	8.33											
Intersection LOS	A											
Intersection V/C	0.779											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.609	0.000	2.508	1.751
Crosswalk LOS	B	F	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	783	483	917	0
d_b, Bicycle Delay [s]	11.10	17.25	8.80	30.00
l_b,int, Bicycle LOS Score for Intersection	2.479	2.030	1.937	4.132
Bicycle LOS	B	B	A	D

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 17: Main Street & SR 91 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	13.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.680

Intersection Setup

Name	Main Street			Main Street			SR-91 WB Ramps			SR-91 WB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			No			Yes		

Volumes

Name	Main Street			Main Street			SR-91 WB Ramps			SR-91 WB Ramps		
Base Volume Input [veh/h]	0	540	104	65	494	0	0	0	0	464	0	405
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	540	104	65	494	0	0	0	0	464	0	405
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	135	26	16	124	0	0	0	0	116	0	101
Total Analysis Volume [veh/h]	0	540	104	65	494	0	0	0	0	464	0	405
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	7	4	0	3	8	0	0	0	0	2	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	30	30	0	0	0	0	30	0	0
Amber [s]	3.5	3.5	0.0	3.5	3.5	0.0	0.0	0.0	0.0	3.5	0.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	9	22	0	9	22	0	0	0	0	29	0	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	5	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	10	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	2.5	2.5	0.0	0.0	0.0	0.0	2.5	0.0	0.0
Minimum Recall	No	No		No	No					No		
Maximum Recall	No	No		No	No					No		
Pedestrian Recall	No	No		No	No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C		L	R
C, Cycle Length [s]	40	40	40	40	40		40	40
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	0	10	10	3	13		14	14
g / C, Green / Cycle	0.00	0.25	0.25	0.07	0.32		0.34	0.34
(v / s)_i Volume / Saturation Flow Rate	0.00	0.18	0.18	0.04	0.14		0.26	0.25
s, saturation flow rate [veh/h]	1781	1870	1767	1781	3560		1781	1589
c, Capacity [veh/h]	0	472	446	117	1131		613	547
d1, Uniform Delay [s]	0.00	13.56	13.58	18.11	10.80		11.62	11.53
k, delay calibration	0.11	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	0.00	1.89	2.04	4.11	0.27		1.94	1.99
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.70	0.70	0.56	0.44		0.76	0.74
d, Delay for Lane Group [s/veh]	0.00	15.45	15.62	22.22	11.07		13.56	13.52
Lane Group LOS	A	B	B	C	B		B	B
Critical Lane Group	No	No	Yes	Yes	No		Yes	No
50th-Percentile Queue Length [veh]	0.00	2.41	2.31	0.64	1.38		3.07	2.68
50th-Percentile Queue Length [ft]	0.00	60.14	57.68	15.89	34.48		76.78	66.91
95th-Percentile Queue Length [veh]	0.00	4.33	4.15	1.14	2.48		5.53	4.82
95th-Percentile Queue Length [ft]	0.00	108.26	103.83	28.59	62.06		138.20	120.44

Movement, Approach, & Intersection Results

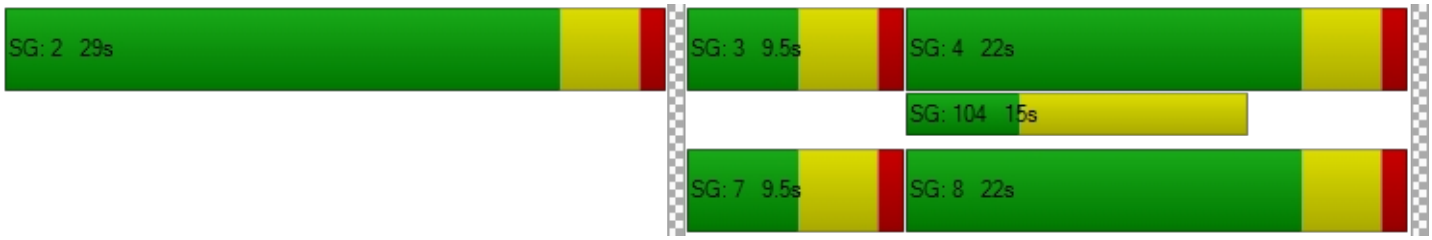
d_M, Delay for Movement [s/veh]	0.00	15.52	15.62	22.22	11.07	0.00	0.00	0.00	0.00	13.56	0.00	13.52
Movement LOS	A	B	B	C	B					B		B
d_A, Approach Delay [s/veh]	15.54			12.36			0.00			13.54		
Approach LOS	B			B			A			B		
d_I, Intersection Delay [s/veh]	13.84											
Intersection LOS	B											
Intersection V/C	0.680											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.258
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	583	583	0	0
d_b, Bicycle Delay [s]	15.05	15.05	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	2.091	2.021	4.132	4.132
Bicycle LOS	B	B	D	D

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 21: I-110 NB On-Ramp & 190th Street

Control Type:	Signalized	Delay (sec / veh):	6.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.445

Intersection Setup

Name	I-110 NB On Ramp			I-110 NB On Ramp			190th Street			190th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	No			Yes			No			No		

Volumes

Name	I-110 NB On Ramp			I-110 NB On Ramp			190th Street			190th Street		
Base Volume Input [veh/h]	0	0	0	0	0	0	158	826	0	0	563	202
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	158	826	0	0	563	202
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	40	207	0	0	141	51
Total Analysis Volume [veh/h]	0	0	0	0	0	0	158	826	0	0	563	202
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	0	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	0	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	30	30	0
Amber [s]	0.0	3.5	0.0	0.0	0.0	0.0	3.5	3.5	0.0	3.5	3.5	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	11	0	0	0	0	19	40	0	9	30	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.5	0.0	0.0	0.0	0.0	2.5	2.5	0.0	2.5	2.5	0.0
Minimum Recall		No					No	No		No	No	
Maximum Recall		No					No	No		No	No	
Pedestrian Recall		No					No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C		L	C	C	L	C	R
C, Cycle Length [s]	24		24	24	24	24	24	24
L, Total Lost Time per Cycle [s]	4.50		4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50		2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	0		3	10	10	0	7	7
g / C, Green / Cycle	0.00		0.14	0.43	0.43	0.00	0.30	0.30
(v / s)_i Volume / Saturation Flow Rate	0.00		0.05	0.22	0.22	0.00	0.16	0.13
s, saturation flow rate [veh/h]	1870		3459	1870	1870	1781	3560	1589
c, Capacity [veh/h]	1		479	812	812	1	1055	471
d1, Uniform Delay [s]	0.00		9.30	4.91	4.91	0.00	7.03	6.78
k, delay calibration	0.11		0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00		0.40	0.49	0.49	0.00	0.42	0.62
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00		0.33	0.51	0.51	0.00	0.53	0.43
d, Delay for Lane Group [s/veh]	0.00		9.70	5.41	5.41	0.00	7.45	7.40
Lane Group LOS	A		A	A	A	A	A	A
Critical Lane Group	No		No	Yes	No	No	No	No
50th-Percentile Queue Length [veh]	0.00		0.26	0.57	0.57	0.00	0.66	0.49
50th-Percentile Queue Length [ft]	0.00		6.51	14.32	14.32	0.00	16.42	12.32
95th-Percentile Queue Length [veh]	0.00		0.47	1.03	1.03	0.00	1.18	0.89
95th-Percentile Queue Length [ft]	0.00		11.71	25.77	25.77	0.00	29.55	22.17

Movement, Approach, & Intersection Results

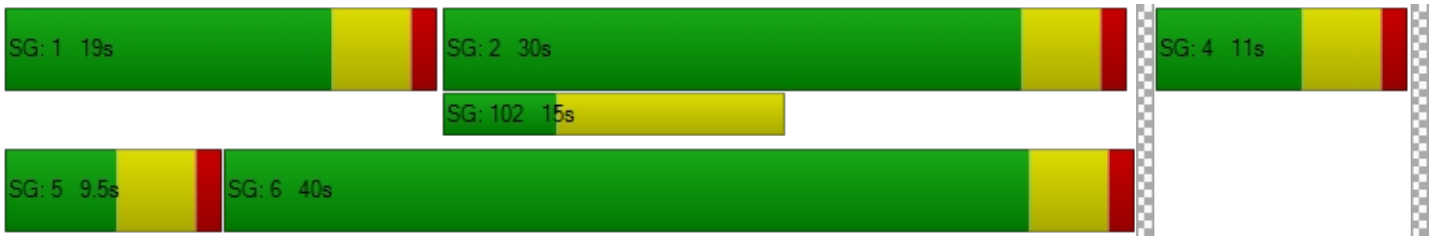
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00	9.70	5.41	5.41	0.00	7.45	7.40
Movement LOS	A	A	A				A	A	A	A	A	A
d_A, Approach Delay [s/veh]	0.00			0.00			6.10			7.44		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	6.68											
Intersection LOS	A											
Intersection V/C	0.445											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	21.68	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	1.871	0.000	0.000
Crosswalk LOS	F	A	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	217	0	1183	850
d_b, Bicycle Delay [s]	23.85	30.00	5.00	9.92
l_b,int, Bicycle LOS Score for Intersection	1.560	4.132	2.371	2.191
Bicycle LOS	A	D	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 22: I-110 SB Off-Ramp & 190th Street

Control Type:	Signalized	Delay (sec / veh):	13.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.806

Intersection Setup

Name	I-110 SB Off-Ramp		190th Street		190th Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	I-110 SB Off-Ramp		190th Street		190th Street	
Base Volume Input [veh/h]	233	718	0	715	588	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	233	718	0	715	588	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	58	180	0	179	147	0
Total Analysis Volume [veh/h]	233	718	0	715	588	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	8	0	0	6	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.5	0.0	0.0	3.5	3.5	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	40	0	0	20	20	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	2.5	2.5	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	42	42	42	42
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	22	22	12	12
g / C, Green / Cycle	0.51	0.51	0.27	0.27
(v / s)_i Volume / Saturation Flow Rate	0.13	0.45	0.20	0.12
s, saturation flow rate [veh/h]	1781	1589	3560	5094
c, Capacity [veh/h]	913	814	976	1396
d1, Uniform Delay [s]	5.76	9.14	13.90	12.56
k, delay calibration	0.11	0.18	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.15	5.25	1.08	0.20
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.26	0.88	0.73	0.42
d, Delay for Lane Group [s/veh]	5.91	14.39	14.98	12.76
Lane Group LOS	A	B	B	B
Critical Lane Group	No	Yes	Yes	No
50th-Percentile Queue Length [veh]	0.79	4.87	2.65	1.27
50th-Percentile Queue Length [ft]	19.76	121.70	66.20	31.63
95th-Percentile Queue Length [veh]	1.42	8.49	4.77	2.28
95th-Percentile Queue Length [ft]	35.57	212.16	119.15	56.93

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	5.91	14.39	0.00	14.98	12.76	0.00
Movement LOS	A	B		B	B	
d_A, Approach Delay [s/veh]	12.31		14.98		12.76	
Approach LOS	B		B		B	
d_I, Intersection Delay [s/veh]	13.27					
Intersection LOS	B					
Intersection V/C	0.806					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	2.159	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.132	4.722	4.456
Bicycle LOS	D	E	E

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	All-way stop	Delay (sec / veh):	40.6
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.979

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	79	110	337	95	764	234
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	79	110	337	95	764	234
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	28	84	24	191	59
Total Analysis Volume [veh/h]	79	110	337	95	764	234
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	454	500	451	482	509	554
Degree of Utilization, x	0.17	0.22	0.75	0.20	0.98	0.90

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.62	0.83	6.19	0.73	13.03	10.68
95th-Percentile Queue Length [ft]	15.58	20.80	154.66	18.15	325.81	267.03
Approach Delay [s/veh]	12.07		26.63		52.00	
Approach LOS	B		D		F	
Intersection Delay [s/veh]	40.57					
Intersection LOS	E					

Intersection Level Of Service Report
Intersection 27: Figueroa Street & I-110 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	15.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.708

Intersection Setup

Name	Figueroa Street		Figueroa Street		I-110 NB Ramps	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name	Figueroa Street		Figueroa Street		I-110 NB Ramps	
Base Volume Input [veh/h]	657	599	411	126	556	223
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	657	599	411	126	556	223
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	164	150	103	32	139	56
Total Analysis Volume [veh/h]	657	599	411	126	556	223
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	7	4	8	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	5	5	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.5	3.5	3.5	0.0	3.5	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	19	38	19	0	22	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	10	10	0	10	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	2.5	0.0	2.5	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	C
C, Cycle Length [s]	49	49	49	49	49	49
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	13	26	9	9	14	14
g / C, Green / Cycle	0.26	0.52	0.17	0.17	0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.19	0.17	0.12	0.08	0.22	0.23
s, saturation flow rate [veh/h]	3459	3560	3560	1589	1781	1664
c, Capacity [veh/h]	889	1863	621	277	522	488
d1, Uniform Delay [s]	16.71	6.70	18.89	18.15	15.77	15.88
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.23	0.10	1.22	1.16	2.34	2.76
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.74	0.32	0.66	0.45	0.76	0.78
d, Delay for Lane Group [s/veh]	17.93	6.80	20.11	19.31	18.11	18.64
Lane Group LOS	B	A	C	B	B	B
Critical Lane Group	Yes	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh]	3.07	1.32	2.04	1.23	3.78	3.69
50th-Percentile Queue Length [ft]	76.87	32.99	51.00	30.73	94.61	92.26
95th-Percentile Queue Length [veh]	5.53	2.37	3.67	2.21	6.81	6.64
95th-Percentile Queue Length [ft]	138.37	59.37	91.79	55.32	170.30	166.07

Movement, Approach, & Intersection Results

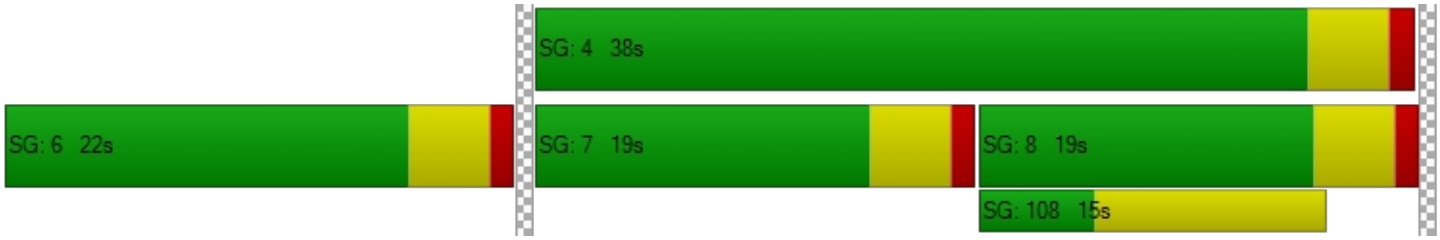
d_M, Delay for Movement [s/veh]	17.93	6.80	20.11	19.31	18.26	18.64
Movement LOS	B	A	C	B	B	B
d_A, Approach Delay [s/veh]	12.62		19.92		18.37	
Approach LOS	B		B		B	
d_I, Intersection Delay [s/veh]	15.89					
Intersection LOS	B					
Intersection V/C	0.708					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.492
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
I_b,int, Bicycle LOS Score for Intersection	5.169	4.575	5.418
Bicycle LOS	F	E	F

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 28: SR 91 EB Ramps & Albertoni Street

Control Type:	Signalized	Delay (sec / veh):	12.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.603

Intersection Setup

Name	SR 91 EB Ramps		Albertoni Street		Albertoni Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	SR 91 EB Ramps		Albertoni Street		Albertoni Street	
Base Volume Input [veh/h]	278	240	277	328	495	88
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	278	240	277	328	495	88
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	70	60	69	82	124	22
Total Analysis Volume [veh/h]	278	240	277	328	495	88
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal group	8	0	1	6	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.5	0.0	3.5	3.5	3.5	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	23	0	14	37	23	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	2.5	2.5	2.5	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	L	C	C	C
C, Cycle Length [s]	36	36	36	36	36	36
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	8	8	5	18	9	9
g / C, Green / Cycle	0.23	0.23	0.14	0.51	0.24	0.24
(v / s)_i Volume / Saturation Flow Rate	0.16	0.15	0.08	0.09	0.16	0.16
s, saturation flow rate [veh/h]	1781	1589	3459	3560	1870	1775
c, Capacity [veh/h]	419	374	498	1829	456	433
d1, Uniform Delay [s]	12.42	12.35	14.27	4.67	12.14	12.26
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.81	1.84	0.97	0.05	1.49	1.82
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.66	0.64	0.56	0.18	0.64	0.67
d, Delay for Lane Group [s/veh]	14.23	14.19	15.24	4.72	13.63	14.08
Lane Group LOS	B	B	B	A	B	B
Critical Lane Group	Yes	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh]	1.76	1.52	0.91	0.36	1.78	1.83
50th-Percentile Queue Length [ft]	44.01	38.04	22.80	9.08	44.62	45.77
95th-Percentile Queue Length [veh]	3.17	2.74	1.64	0.65	3.21	3.30
95th-Percentile Queue Length [ft]	79.22	68.47	41.03	16.34	80.31	82.39

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	14.23	14.19	15.24	4.72	13.82	14.08
Movement LOS	B	B	B	A	B	B
d_A, Approach Delay [s/veh]	14.21		9.54		13.86	
Approach LOS	B		A		B	
d_I, Intersection Delay [s/veh]	12.43					
Intersection LOS	B					
Intersection V/C	0.603					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.327	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
I_b,int, Bicycle LOS Score for Intersection	4.132	4.632	4.613
Bicycle LOS	D	E	E

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 2: Main Street & I-405 NB Off-Ramp

Control Type:	Signalized	Delay (sec / veh):	12.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.756

Intersection Setup

Name	Main Street			Main Street			I-405 NB Off-Ramp			I-405 NB Off-Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			30.00			30.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No			No						No	
Crosswalk		No			No			Yes			Yes	

Volumes

Name	Main Street			Main Street			I-405 NB Off-Ramp			I-405 NB Off-Ramp		
Base Volume Input [veh/h]	21	703	0	0	1276	92	0	0	0	61	121	246
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	21	703	0	0	1276	92	0	0	0	61	121	246
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	176	0	0	319	23	0	0	0	15	30	62
Total Analysis Volume [veh/h]	21	703	0	0	1276	92	0	0	0	61	121	246
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	7	4	0	0	8	0	0	0	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	30	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	10	43	0	0	33	0	0	0	0	0	17	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	0	10	0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.5	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C		C	C
C, Cycle Length [s]	45	45	45	45		45	45
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	1	26	20	20		10	10
g / C, Green / Cycle	0.03	0.58	0.45	0.45		0.23	0.23
(v / s)_i Volume / Saturation Flow Rate	0.01	0.20	0.37	0.37		0.10	0.17
s, saturation flow rate [veh/h]	1781	3560	1870	1827		1839	1446
c, Capacity [veh/h]	46	2050	844	824		417	328
d1, Uniform Delay [s]	21.87	5.11	10.82	10.98		15.12	16.42
k, delay calibration	0.11	0.11	0.12	0.13		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	6.75	0.10	2.11	2.64		0.72	3.46
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.45	0.34	0.81	0.83		0.44	0.75
d, Delay for Lane Group [s/veh]	28.62	5.21	12.93	13.61		15.85	19.88
Lane Group LOS	C	A	B	B		B	B
Critical Lane Group	Yes	No	No	Yes		No	Yes
50th-Percentile Queue Length [veh]	0.29	1.11	4.86	5.03		1.47	2.35
50th-Percentile Queue Length [ft]	7.17	27.75	121.46	125.70		36.82	58.85
95th-Percentile Queue Length [veh]	0.52	2.00	8.47	8.71		2.65	4.24
95th-Percentile Queue Length [ft]	12.91	49.94	211.83	217.63		66.28	105.93

Movement, Approach, & Intersection Results

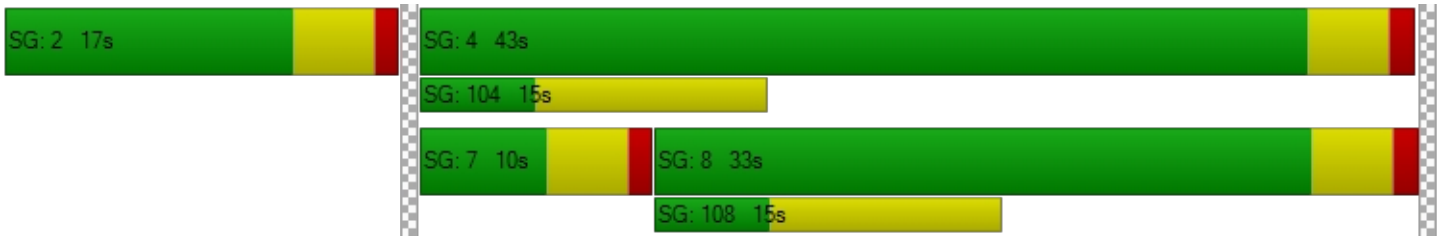
d_M, Delay for Movement [s/veh]	28.62	5.21	0.00	0.00	13.25	13.61	0.00	0.00	0.00	15.85	15.85	19.88
Movement LOS	C	A			B	B				B	B	B
d_A, Approach Delay [s/veh]	5.88			13.27			0.00			18.17		
Approach LOS	A			B			A			B		
d_I, Intersection Delay [s/veh]	11.98											
Intersection LOS	B											
Intersection V/C	0.756											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.810	1.904
Crosswalk LOS	F	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1283	950	0	417
d_b, Bicycle Delay [s]	3.85	8.27	30.00	18.80
l_b,int, Bicycle LOS Score for Intersection	2.157	2.688	4.132	1.913
Bicycle LOS	B	B	D	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Main Street & I-405 SB On Ramp

Control Type:	Signalized	Delay (sec / veh):	13.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.741

Intersection Setup

Name	Main Street			Main Street			I-405 SB On Ramp			I-405 SB On Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			30.00			30.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No			No			No				
Crosswalk		Yes			No			Yes			Yes	

Volumes

Name	Main Street			Main Street			I-405 SB On Ramp			I-405 SB On Ramp		
Base Volume Input [veh/h]	0	668	109	282	1055	0	61	276	42	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	668	109	282	1055	0	61	276	42	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	167	27	71	264	0	15	69	11	0	0	0
Total Analysis Volume [veh/h]	0	668	109	282	1055	0	61	276	42	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	4	0	3	8	0	0	6	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	5	0	5	5	0	0	5	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	0	30	0	0	0	0
Amber [s]	0.0	3.5	0.0	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	0	20	0	20	40	0	0	20	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	0	0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.5	0.0	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No			No				
Maximum Recall		No		No	No			No				
Pedestrian Recall		No		No	No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	L	C	
C, Cycle Length [s]	47	47	47	47	47	47	
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	
g_i, Effective Green Time [s]	13	13	9	27	10	10	
g / C, Green / Cycle	0.28	0.28	0.20	0.58	0.22	0.22	
(v / s)_i Volume / Saturation Flow Rate	0.21	0.22	0.16	0.30	0.03	0.17	
s, saturation flow rate [veh/h]	1870	1782	1781	3560	1781	1827	
c, Capacity [veh/h]	531	506	361	2076	400	410	
d1, Uniform Delay [s]	15.13	15.32	17.65	5.77	14.56	17.02	
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	1.97	2.49	3.69	0.19	0.18	3.17	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.73	0.77	0.78	0.51	0.15	0.78	
d, Delay for Lane Group [s/veh]	17.09	17.81	21.34	5.97	14.73	20.19	
Lane Group LOS	B	B	C	A	B	C	
Critical Lane Group	No	Yes	Yes	No	No	Yes	
50th-Percentile Queue Length [veh]	3.42	3.52	2.86	1.94	0.47	3.12	
50th-Percentile Queue Length [ft]	85.55	88.07	71.57	48.56	11.79	77.93	
95th-Percentile Queue Length [veh]	6.16	6.34	5.15	3.50	0.85	5.61	
95th-Percentile Queue Length [ft]	154.00	158.52	128.83	87.40	21.22	140.28	

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	17.39	17.81	21.34	5.97	0.00	14.73	20.19	20.19	0.00	0.00	0.00
Movement LOS		B	B	C	A		B	C	C			
d_A, Approach Delay [s/veh]	17.45			9.21			19.31			0.00		
Approach LOS	B			A			B			A		
d_I, Intersection Delay [s/veh]	13.31											
Intersection LOS	B											
Intersection V/C	0.741											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.569	0.000	1.880	2.054
Crosswalk LOS	B	F	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	517	1183	517	0
d_b, Bicycle Delay [s]	16.50	5.00	16.50	30.00
l_b,int, Bicycle LOS Score for Intersection	2.201	2.663	2.185	4.132
Bicycle LOS	B	B	B	D

Sequence

Ring 1	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Avalon Boulevard & SR-91 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	8.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.502

Intersection Setup

Name	Avalon Boulevard		Avalon Boulevard		SR-91 WB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name	Avalon Boulevard		Avalon Boulevard		SR-91 WB Ramps	
Base Volume Input [veh/h]	1190	232	163	1072	358	449
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1190	232	163	1072	358	449
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	298	58	41	268	90	112
Total Analysis Volume [veh/h]	1190	232	163	1072	358	449
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	4	0	0	8	2	0
Auxiliary Signal Groups						
Lead / Lag	-	-	-	-	Lead	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.5	0.0	0.0	3.5	3.5	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	34	0	0	34	26	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	2.5	2.5	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	C	R
C, Cycle Length [s]	39	39	39	39	39	39	39
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	20	20	20	20	10	10	10
g / C, Green / Cycle	0.51	0.51	0.51	0.51	0.26	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.23	0.15	0.18	0.21	0.16	0.16	0.16
s, saturation flow rate [veh/h]	5094	1589	914	5094	1781	1642	1589
c, Capacity [veh/h]	2595	810	473	2595	459	423	410
d1, Uniform Delay [s]	6.07	5.45	11.07	5.90	12.64	12.72	12.75
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.13	0.19	0.43	0.11	1.31	1.54	1.65
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.46	0.29	0.34	0.41	0.61	0.63	0.64
d, Delay for Lane Group [s/veh]	6.20	5.64	11.50	6.00	13.94	14.26	14.40
Lane Group LOS	A	A	B	A	B	B	B
Critical Lane Group	Yes	No	No	No	No	No	Yes
50th-Percentile Queue Length [veh]	1.25	0.68	0.47	1.09	1.85	1.79	1.77
50th-Percentile Queue Length [ft]	31.30	17.11	11.76	27.34	46.19	44.85	44.33
95th-Percentile Queue Length [veh]	2.25	1.23	0.85	1.97	3.33	3.23	3.19
95th-Percentile Queue Length [ft]	56.34	30.80	21.17	49.21	83.13	80.73	79.80

Movement, Approach, & Intersection Results

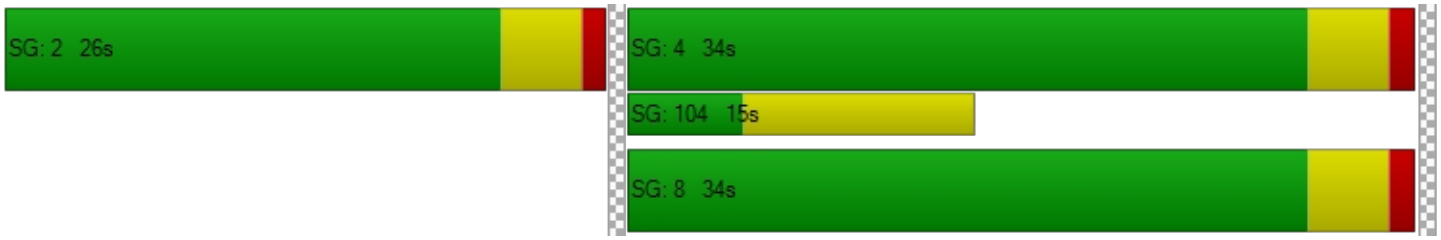
d_M, Delay for Movement [s/veh]	6.20	5.64	11.50	6.00	14.02	14.34
Movement LOS	A	A	B	A	B	B
d_A, Approach Delay [s/veh]	6.11		6.73		14.20	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	8.21					
Intersection LOS	A					
Intersection V/C	0.502					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.747
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.915	4.812	5.464
Bicycle LOS	E	E	F

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Avalon Boulevard & I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	7.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.548

Intersection Setup

Name	Avalon Boulevard			Avalon Boulevard			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			30.00			30.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No			No						No	
Crosswalk		No			No			Yes			Yes	

Volumes

Name	Avalon Boulevard			Avalon Boulevard			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	301	1093	0	0	1346	485	0	0	0	82	2	401
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	301	1093	0	0	1346	485	0	0	0	82	2	401
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	75	273	0	0	337	121	0	0	0	21	1	100
Total Analysis Volume [veh/h]	301	1093	0	0	1346	485	0	0	0	82	2	401
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss	Permiss	Permiss	Unsigna
Signal group	7	4	0	0	8	0	0	0	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	30	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	15	50	0	0	35	0	0	0	0	0	10	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	0	10	0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.5	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C		L	C
C, Cycle Length [s]	38	38	38		38	38
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	6	26	16		3	3
g / C, Green / Cycle	0.15	0.68	0.42		0.08	0.08
(v / s)_i Volume / Saturation Flow Rate	0.09	0.31	0.26		0.02	0.02
s, saturation flow rate [veh/h]	3459	3560	5094		1781	1785
c, Capacity [veh/h]	521	2439	2119		139	140
d1, Uniform Delay [s]	15.03	2.72	8.82		16.55	16.55
k, delay calibration	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	1.01	0.13	0.32		1.20	1.19
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.58	0.45	0.64		0.30	0.30
d, Delay for Lane Group [s/veh]	16.04	2.85	9.13		17.74	17.74
Lane Group LOS	B	A	A		B	B
Critical Lane Group	Yes	No	Yes		Yes	No
50th-Percentile Queue Length [veh]	1.07	0.39	2.06		0.34	0.34
50th-Percentile Queue Length [ft]	26.84	9.74	51.46		8.50	8.50
95th-Percentile Queue Length [veh]	1.93	0.70	3.70		0.61	0.61
95th-Percentile Queue Length [ft]	48.32	17.52	92.62		15.30	15.31

Movement, Approach, & Intersection Results

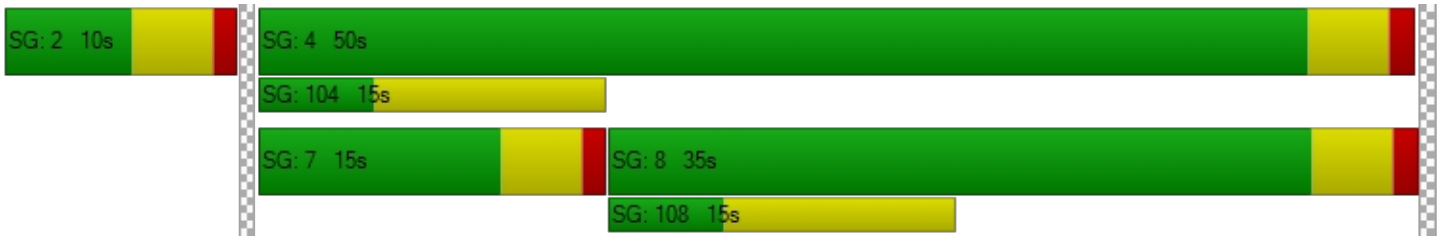
d_M, Delay for Movement [s/veh]	16.04	2.85	0.00	0.00	9.13	0.00	0.00	0.00	0.00	17.74	17.74	0.00
Movement LOS	B	A			A					B	B	
d_A, Approach Delay [s/veh]	5.70			9.13			0.00			17.74		
Approach LOS	A			A			A			B		
d_I, Intersection Delay [s/veh]	7.69											
Intersection LOS	A											
Intersection V/C	0.548											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.843	1.948
Crosswalk LOS	F	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1517	1017	0	183
d_b, Bicycle Delay [s]	1.75	7.25	30.00	24.75
l_b,int, Bicycle LOS Score for Intersection	2.710	2.300	4.132	1.698
Bicycle LOS	B	B	D	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 16: Avalon Boulevard & I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	7.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.684

Intersection Setup

Name	Avalon Boulevard			Avalon Boulevard			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			30.00			30.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No			No			No				
Crosswalk		Yes			No			Yes			Yes	

Volumes

Name	Avalon Boulevard			Avalon Boulevard			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	0	1109	181	0	1059	373	250	169	345	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1109	181	0	1059	373	250	169	345	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	277	45	0	265	93	63	42	86	0	0	0
Total Analysis Volume [veh/h]	0	1109	181	0	1059	373	250	169	345	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss
Signal group	7	4	0	0	8	0	0	6	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	5	0	0	0	0
Maximum Green [s]	30	30	0	0	30	0	0	30	0	0	0	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	10	40	0	0	30	0	0	20	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	0	0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Minimum Recall	No	No			No			No				
Maximum Recall	No	No			No			No				
Pedestrian Recall	No	No			No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	C	
C, Cycle Length [s]	32	32	32	32	32	32	
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	
g_i, Effective Green Time [s]	0	18	18	13	5	5	
g / C, Green / Cycle	0.00	0.56	0.56	0.42	0.16	0.16	
(v / s)_i Volume / Saturation Flow Rate	0.00	0.35	0.35	0.30	0.07	0.05	
s, saturation flow rate [veh/h]	1781	1870	1780	3560	3459	3560	
c, Capacity [veh/h]	1	1048	998	1495	549	565	
d1, Uniform Delay [s]	0.00	4.78	4.79	7.68	12.23	11.91	
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.00	0.63	0.67	0.63	0.59	0.29	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.00	0.63	0.63	0.71	0.46	0.30	
d, Delay for Lane Group [s/veh]	0.00	5.41	5.46	8.31	12.82	12.21	
Lane Group LOS	A	A	A	A	B	B	
Critical Lane Group	No	No	Yes	No	Yes	No	
50th-Percentile Queue Length [veh]	0.00	1.22	1.18	1.84	0.66	0.43	
50th-Percentile Queue Length [ft]	0.00	30.47	29.48	46.04	16.56	10.74	
95th-Percentile Queue Length [veh]	0.00	2.19	2.12	3.31	1.19	0.77	
95th-Percentile Queue Length [ft]	0.00	54.85	53.07	82.87	29.81	19.33	

Movement, Approach, & Intersection Results

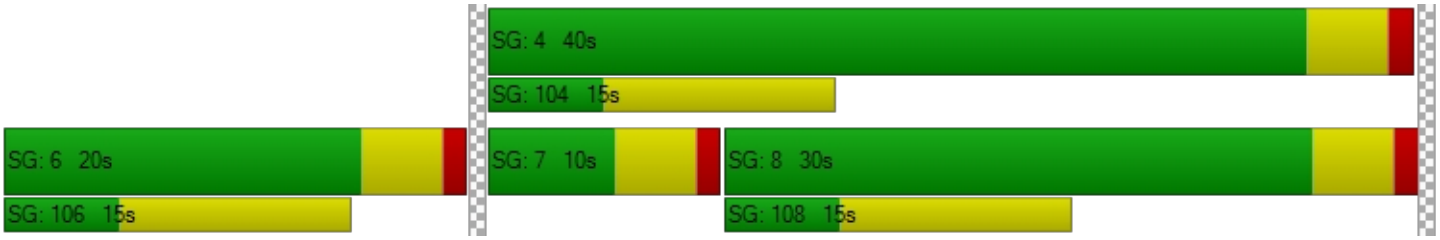
d_M, Delay for Movement [s/veh]	0.00	5.43	5.46	0.00	8.31	0.00	12.82	12.21	0.00	0.00	0.00	0.00
Movement LOS	A	A	A		A		B	B				
d_A, Approach Delay [s/veh]	5.43			8.31			12.57			0.00		
Approach LOS	A			A			B			A		
d_I, Intersection Delay [s/veh]	7.61											
Intersection LOS	A											
Intersection V/C	0.684											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.739	0.000	2.502	1.866
Crosswalk LOS	B	F	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1183	850	517	0
d_b, Bicycle Delay [s]	5.00	9.92	16.50	30.00
l_b,int, Bicycle LOS Score for Intersection	2.624	2.433	1.905	4.132
Bicycle LOS	B	B	A	D

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 17: Main Street & SR 91 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	13.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.674

Intersection Setup

Name	Main Street			Main Street			SR-91 WB Ramps			SR-91 WB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			No			Yes		

Volumes

Name	Main Street			Main Street			SR-91 WB Ramps			SR-91 WB Ramps		
Base Volume Input [veh/h]	1	588	119	108	741	0	0	0	0	244	0	326
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	588	119	108	741	0	0	0	0	244	0	326
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	147	30	27	185	0	0	0	0	61	0	82
Total Analysis Volume [veh/h]	1	588	119	108	741	0	0	0	0	244	0	326
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	7	4	0	3	8	0	0	0	0	2	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	30	30	0	0	0	0	30	0	0
Amber [s]	3.5	3.5	0.0	3.5	3.5	0.0	0.0	0.0	0.0	3.5	0.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	10	24	0	11	25	0	0	0	0	25	0	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	5	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	10	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	2.5	2.5	0.0	0.0	0.0	0.0	2.5	0.0	0.0
Minimum Recall	No	No		No	No					No		
Maximum Recall	No	No		No	No					No		
Pedestrian Recall	No	No		No	No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C		L	R
C, Cycle Length [s]	38	38	38	38	38		38	38
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	0	10	10	3	14		11	11
g / C, Green / Cycle	0.00	0.27	0.27	0.09	0.36		0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.00	0.19	0.20	0.06	0.21		0.14	0.21
s, saturation flow rate [veh/h]	1781	1870	1762	1781	3560		1781	1589
c, Capacity [veh/h]	3	515	485	161	1297		499	445
d1, Uniform Delay [s]	19.01	12.42	12.44	16.78	9.73		11.45	12.44
k, delay calibration	0.11	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	60.59	1.78	1.92	4.72	0.40		0.75	2.35
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.35	0.71	0.71	0.67	0.57		0.49	0.73
d, Delay for Lane Group [s/veh]	79.60	14.21	14.35	21.51	10.12		12.20	14.78
Lane Group LOS	E	B	B	C	B		B	B
Critical Lane Group	No	No	Yes	Yes	No		No	Yes
50th-Percentile Queue Length [veh]	0.06	2.40	2.29	0.98	1.86		1.44	2.22
50th-Percentile Queue Length [ft]	1.39	60.07	57.34	24.58	46.56		35.92	55.62
95th-Percentile Queue Length [veh]	0.10	4.33	4.13	1.77	3.35		2.59	4.00
95th-Percentile Queue Length [ft]	2.51	108.13	103.21	44.24	83.81		64.66	100.12

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	79.60	14.26	14.35	21.51	10.12	0.00	0.00	0.00	0.00	12.20	0.00	14.78
Movement LOS	E	B	B	C	B					B		B
d_A, Approach Delay [s/veh]	14.37			11.57			0.00			13.68		
Approach LOS	B			B			A			B		
d_I, Intersection Delay [s/veh]	13.07											
Intersection LOS	B											
Intersection V/C	0.674											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.180
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	650	683	0	0
d_b, Bicycle Delay [s]	13.67	13.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	2.144	2.260	4.132	4.132
Bicycle LOS	B	B	D	D

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 21: I-110 NB On-Ramp & 190th Street

Control Type:	Signalized	Delay (sec / veh):	7.5
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.555

Intersection Setup

Name	I-110 NB On Ramp			I-110 NB On Ramp			190th Street			190th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	No			Yes			No			No		

Volumes

Name	I-110 NB On Ramp			I-110 NB On Ramp			190th Street			190th Street		
Base Volume Input [veh/h]	0	0	0	0	0	0	435	1225	0	0	695	251
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	435	1225	0	0	695	251
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	109	306	0	0	174	63
Total Analysis Volume [veh/h]	0	0	0	0	0	0	435	1225	0	0	695	251
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	0	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	0	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	30	30	0
Amber [s]	0.0	3.5	0.0	0.0	0.0	0.0	3.5	3.5	0.0	3.5	3.5	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	28	0	0	0	0	12	22	0	10	20	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.5	0.0	0.0	0.0	0.0	2.5	2.5	0.0	2.5	2.5	0.0
Minimum Recall		No					No	No		No	No	
Maximum Recall		No					No	No		No	No	
Pedestrian Recall		No					No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C		L	C	C	L	C	R
C, Cycle Length [s]	29		29	29	29	29	29	29
L, Total Lost Time per Cycle [s]	4.50		4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50		2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	0		6	16	16	0	9	9
g / C, Green / Cycle	0.00		0.22	0.54	0.54	0.00	0.32	0.32
(v / s)_i Volume / Saturation Flow Rate	0.00		0.13	0.33	0.33	0.00	0.20	0.16
s, saturation flow rate [veh/h]	1870		3459	1870	1870	1781	3560	1589
c, Capacity [veh/h]	0		759	1009	1009	0	1140	509
d1, Uniform Delay [s]	0.00		10.23	4.63	4.63	0.00	8.42	8.05
k, delay calibration	0.11		0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00		0.69	0.59	0.59	0.00	0.53	0.74
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00		0.57	0.61	0.61	0.00	0.61	0.49
d, Delay for Lane Group [s/veh]	0.00		10.91	5.22	5.22	0.00	8.95	8.79
Lane Group LOS	A		B	A	A	A	A	A
Critical Lane Group	No		No	Yes	No	No	No	No
50th-Percentile Queue Length [veh]	0.00		0.93	0.96	0.96	0.00	1.23	0.89
50th-Percentile Queue Length [ft]	0.00		23.36	23.92	23.92	0.00	30.66	22.34
95th-Percentile Queue Length [veh]	0.00		1.68	1.72	1.72	0.00	2.21	1.61
95th-Percentile Queue Length [ft]	0.00		42.06	43.06	43.06	0.00	55.19	40.20

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00	10.91	5.22	5.22	0.00	8.95	8.79
Movement LOS	A	A	A				B	A	A	A	A	A
d_A, Approach Delay [s/veh]	0.00			0.00			6.71			8.91		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	7.51											
Intersection LOS	A											
Intersection V/C	0.555											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	21.68	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	2.030	0.000	0.000
Crosswalk LOS	F	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	783	0	583	517
d_b, Bicycle Delay [s]	11.10	30.00	15.05	16.50
l_b,int, Bicycle LOS Score for Intersection	1.560	4.132	2.929	2.340
Bicycle LOS	A	D	C	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 22: I-110 SB Off-Ramp & 190th Street

Control Type:	Signalized	Delay (sec / veh):	12.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.799

Intersection Setup

Name	I-110 SB Off-Ramp		190th Street		190th Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	I-110 SB Off-Ramp		190th Street		190th Street	
Base Volume Input [veh/h]	321	461	0	1347	689	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	321	461	0	1347	689	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	80	115	0	337	172	0
Total Analysis Volume [veh/h]	321	461	0	1347	689	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	8	0	0	6	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.5	0.0	0.0	3.5	3.5	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	30	0	0	30	30	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	2.5	2.5	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	49	49	49	49
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	17	17	23	23
g / C, Green / Cycle	0.35	0.35	0.47	0.47
(v / s)_i Volume / Saturation Flow Rate	0.18	0.29	0.38	0.14
s, saturation flow rate [veh/h]	1781	1589	3560	5094
c, Capacity [veh/h]	624	557	1659	2373
d1, Uniform Delay [s]	12.62	14.57	11.26	8.09
k, delay calibration	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.66	3.21	1.00	0.07
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.51	0.83	0.81	0.29
d, Delay for Lane Group [s/veh]	13.28	17.78	12.26	8.16
Lane Group LOS	B	B	B	A
Critical Lane Group	No	Yes	Yes	No
50th-Percentile Queue Length [veh]	2.44	4.35	4.97	1.18
50th-Percentile Queue Length [ft]	61.00	108.83	124.16	29.39
95th-Percentile Queue Length [veh]	4.39	7.78	8.62	2.12
95th-Percentile Queue Length [ft]	109.80	194.38	215.53	52.91

Movement, Approach, & Intersection Results

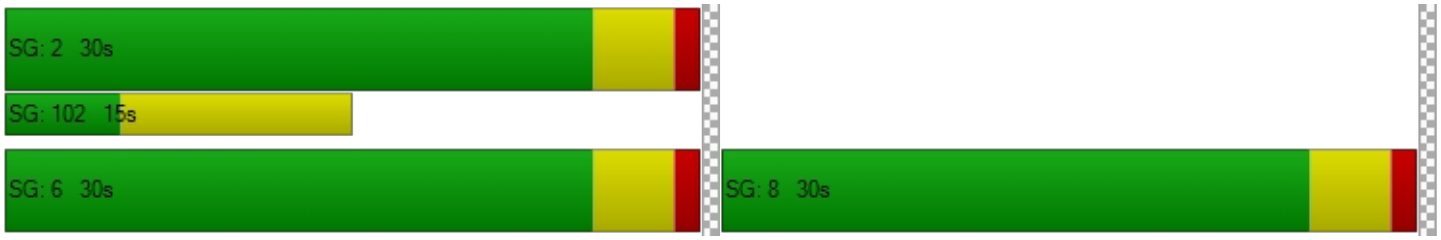
d_M, Delay for Movement [s/veh]	13.28	17.78	0.00	12.26	8.16	0.00
Movement LOS	B	B		B	A	
d_A, Approach Delay [s/veh]	15.93		12.26		8.16	
Approach LOS	B		B		A	
d_I, Intersection Delay [s/veh]	12.27					
Intersection LOS	B					
Intersection V/C	0.799					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.077	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
I_b,int, Bicycle LOS Score for Intersection	4.132	5.244	4.511
Bicycle LOS	D	F	E

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	All-way stop	Delay (sec / veh):	86.7
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.339

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	61	534	648	169	296	102
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	61	534	648	169	296	102
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	134	162	42	74	26
Total Analysis Volume [veh/h]	61	534	648	169	296	102
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	513	569	648	520	444	481
Degree of Utilization, x	0.12	0.94	1.34	0.33	0.45	0.41

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.40	12.11	28.91	1.40	2.27	2.01
95th-Percentile Queue Length [ft]	10.06	302.74	722.74	35.02	56.71	50.23
Approach Delay [s/veh]	44.66		151.69		16.32	
Approach LOS	E		F		C	
Intersection Delay [s/veh]	86.74					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 27: Figueroa Street & I-110 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	15.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.713

Intersection Setup

Name	Figueroa Street		Figueroa Street		I-110 NB Ramps	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name	Figueroa Street		Figueroa Street		I-110 NB Ramps	
Base Volume Input [veh/h]	499	420	888	147	374	138
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	499	420	888	147	374	138
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	125	105	222	37	94	35
Total Analysis Volume [veh/h]	499	420	888	147	374	138
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	7	4	8	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	5	5	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.5	3.5	3.5	0.0	3.5	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	17	43	26	0	17	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	10	10	0	10	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	2.5	0.0	2.5	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	C
C, Cycle Length [s]	50	50	50	50	50	50
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	10	31	16	16	10	10
g / C, Green / Cycle	0.20	0.62	0.32	0.32	0.20	0.20
(v / s)_i Volume / Saturation Flow Rate	0.14	0.12	0.25	0.09	0.15	0.15
s, saturation flow rate [veh/h]	3459	3560	3560	1589	1781	1669
c, Capacity [veh/h]	705	2195	1149	513	364	341
d1, Uniform Delay [s]	18.58	4.19	15.33	12.68	18.65	18.66
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.32	0.04	1.14	0.30	2.78	2.96
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.71	0.19	0.77	0.29	0.73	0.73
d, Delay for Lane Group [s/veh]	19.91	4.23	16.47	12.98	21.43	21.62
Lane Group LOS	B	A	B	B	C	C
Critical Lane Group	Yes	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh]	2.52	0.60	4.05	1.10	2.82	2.66
50th-Percentile Queue Length [ft]	62.95	14.93	101.23	27.56	70.53	66.54
95th-Percentile Queue Length [veh]	4.53	1.07	7.29	1.98	5.08	4.79
95th-Percentile Queue Length [ft]	113.31	26.87	182.21	49.61	126.95	119.77

Movement, Approach, & Intersection Results

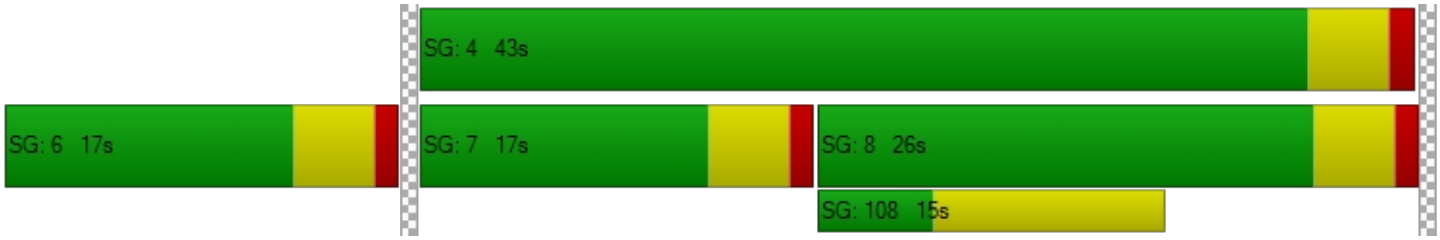
d_M, Delay for Movement [s/veh]	19.91	4.23	16.47	12.98	21.49	21.62
Movement LOS	B	A	B	B	C	C
d_A, Approach Delay [s/veh]	12.74		15.97		21.52	
Approach LOS	B		B		C	
d_I, Intersection Delay [s/veh]	15.92					
Intersection LOS	B					
Intersection V/C	0.713					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.394
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.891	4.986	4.977
Bicycle LOS	E	E	E

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 28: SR 91 EB Ramps & Albertoni Street

Control Type:	Signalized	Delay (sec / veh):	11.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.695

Intersection Setup

Name	SR 91 EB Ramps		Albertoni Street		Albertoni Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	SR 91 EB Ramps		Albertoni Street		Albertoni Street	
Base Volume Input [veh/h]	426	327	218	815	352	62
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	426	327	218	815	352	62
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	107	82	55	204	88	16
Total Analysis Volume [veh/h]	426	327	218	815	352	62
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal group	8	0	1	6	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.5	0.0	3.5	3.5	3.5	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	29	0	11	31	20	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	2.5	2.5	2.5	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	L	C	C	C
C, Cycle Length [s]	37	37	37	37	37	37
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	12	12	4	16	7	7
g / C, Green / Cycle	0.32	0.32	0.12	0.43	0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.24	0.21	0.06	0.23	0.11	0.12
s, saturation flow rate [veh/h]	1781	1589	3459	3560	1870	1776
c, Capacity [veh/h]	579	517	423	1535	350	332
d1, Uniform Delay [s]	11.05	10.59	15.18	7.75	13.73	13.82
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.84	1.29	0.97	0.29	1.60	1.92
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.74	0.63	0.52	0.53	0.59	0.62
d, Delay for Lane Group [s/veh]	12.89	11.87	16.16	8.04	15.33	15.74
Lane Group LOS	B	B	B	A	B	B
Critical Lane Group	Yes	No	No	Yes	No	No
50th-Percentile Queue Length [veh]	2.54	1.84	0.76	1.61	1.42	1.45
50th-Percentile Queue Length [ft]	63.60	45.94	19.10	40.18	35.45	36.19
95th-Percentile Queue Length [veh]	4.58	3.31	1.38	2.89	2.55	2.61
95th-Percentile Queue Length [ft]	114.49	82.69	34.38	72.33	63.81	65.15

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	12.89	11.87	16.16	8.04	15.50	15.74
Movement LOS	B	B	B	A	B	B
d_A, Approach Delay [s/veh]	12.45		9.75		15.53	
Approach LOS	B		A		B	
d_I, Intersection Delay [s/veh]	11.76					
Intersection LOS	B					
Intersection V/C	0.695					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	2.364	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.132	4.985	4.474
Bicycle LOS	D	E	E

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 2: Main Street & I-405 NB Off-Ramp

Control Type:	Signalized	Delay (sec / veh):	11.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.667

Intersection Setup

Name	Main Street			Main Street			I-405 NB Off-Ramp			I-405 NB Off-Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Main Street			Main Street			I-405 NB Off-Ramp			I-405 NB Off-Ramp		
Base Volume Input [veh/h]	28	688	0	0	756	71	0	0	0	107	327	252
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	28	688	0	0	756	71	0	0	0	107	327	252
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	172	0	0	189	18	0	0	0	27	82	63
Total Analysis Volume [veh/h]	28	688	0	0	756	71	0	0	0	107	327	252
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	7	4	0	0	8	0	0	0	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	30	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	10	35	0	0	25	0	0	0	0	0	25	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	0	10	0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.5	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C		C	C
C, Cycle Length [s]	37	37	37	37		37	37
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	1	17	12	12		11	11
g / C, Green / Cycle	0.03	0.47	0.31	0.31		0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.02	0.19	0.22	0.23		0.21	0.21
s, saturation flow rate [veh/h]	1781	3560	1870	1815		1844	1487
c, Capacity [veh/h]	62	1670	586	569		533	430
d1, Uniform Delay [s]	17.62	6.50	11.26	11.36		11.83	11.86
k, delay calibration	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	5.12	0.16	1.57	1.79		1.76	2.24
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.45	0.41	0.71	0.73		0.71	0.72
d, Delay for Lane Group [s/veh]	22.73	6.67	12.83	13.15		13.58	14.10
Lane Group LOS	C	A	B	B		B	B
Critical Lane Group	Yes	No	No	Yes		No	Yes
50th-Percentile Queue Length [veh]	0.29	1.14	2.48	2.53		2.37	1.99
50th-Percentile Queue Length [ft]	7.21	28.50	61.98	63.15		59.27	49.78
95th-Percentile Queue Length [veh]	0.52	2.05	4.46	4.55		4.27	3.58
95th-Percentile Queue Length [ft]	12.98	51.29	111.57	113.68		106.69	89.61

Movement, Approach, & Intersection Results

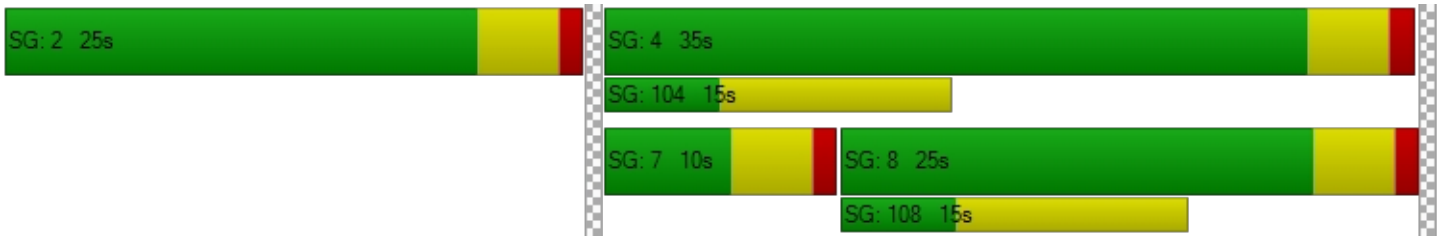
d_M, Delay for Movement [s/veh]	22.73	6.67	0.00	0.00	12.98	13.15	0.00	0.00	0.00	13.58	13.67	14.10
Movement LOS	C	A			B	B				B	B	B
d_A, Approach Delay [s/veh]	7.29			12.99			0.00			13.82		
Approach LOS	A			B			A			B		
d_I, Intersection Delay [s/veh]	11.42											
Intersection LOS	B											
Intersection V/C	0.667											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.903	2.030
Crosswalk LOS	F	F	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1017	683	0	683
d_b, Bicycle Delay [s]	7.25	13.00	30.00	13.00
l_b,int, Bicycle LOS Score for Intersection	2.150	2.242	4.132	2.126
Bicycle LOS	B	B	D	B

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Main Street & I-405 SB On Ramp

Control Type:	Signalized	Delay (sec / veh):	7.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.572

Intersection Setup

Name	Main Street			Main Street			I-405 SB On Ramp			I-405 SB On Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			30.00			30.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No			No			No				
Crosswalk		Yes			No			Yes			Yes	

Volumes

Name	Main Street			Main Street			I-405 SB On Ramp			I-405 SB On Ramp		
Base Volume Input [veh/h]	0	629	69	158	763	0	29	72	21	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	629	69	158	763	0	29	72	21	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	157	17	40	191	0	7	18	5	0	0	0
Total Analysis Volume [veh/h]	0	629	69	158	763	0	29	72	21	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	4	0	3	8	0	0	6	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	5	0	5	5	0	0	5	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	0	30	0	0	0	0
Amber [s]	0.0	3.5	0.0	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	0	20	0	20	40	0	0	20	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	0	0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.5	0.0	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No			No				
Maximum Recall		No		No	No			No				
Pedestrian Recall		No		No	No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	L	C	
C, Cycle Length [s]	29	29	29	29	29	29	
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	
g_i, Effective Green Time [s]	9	9	4	17	3	3	
g / C, Green / Cycle	0.30	0.30	0.13	0.58	0.11	0.11	
(v / s)_i Volume / Saturation Flow Rate	0.19	0.19	0.09	0.21	0.02	0.05	
s, saturation flow rate [veh/h]	1870	1807	1781	3560	1781	1798	
c, Capacity [veh/h]	555	536	225	2060	195	197	
d1, Uniform Delay [s]	8.78	8.86	12.10	3.26	11.64	12.07	
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	1.18	1.34	3.97	0.11	0.35	1.74	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.63	0.65	0.70	0.37	0.15	0.47	
d, Delay for Lane Group [s/veh]	9.97	10.20	16.07	3.37	11.98	13.81	
Lane Group LOS	A	B	B	A	B	B	
Critical Lane Group	No	Yes	Yes	No	No	Yes	
50th-Percentile Queue Length [veh]	1.36	1.39	0.96	0.27	0.14	0.51	
50th-Percentile Queue Length [ft]	34.00	34.68	23.99	6.74	3.59	12.78	
95th-Percentile Queue Length [veh]	2.45	2.50	1.73	0.49	0.26	0.92	
95th-Percentile Queue Length [ft]	61.20	62.43	43.19	12.13	6.47	23.00	

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	10.07	10.20	16.07	3.37	0.00	11.98	13.81	13.81	0.00	0.00	0.00
Movement LOS		B	B	B	A		B	B	B			
d_A, Approach Delay [s/veh]	10.08			5.55			13.38			0.00		
Approach LOS	B			A			B			A		
d_I, Intersection Delay [s/veh]	7.92											
Intersection LOS	A											
Intersection V/C	0.572											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.473	0.000	1.755	1.696
Crosswalk LOS	B	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	517	1183	517	0
d_b, Bicycle Delay [s]	16.50	5.00	16.50	30.00
l_b,int, Bicycle LOS Score for Intersection	2.135	2.319	1.761	4.132
Bicycle LOS	B	B	A	D

Sequence

Ring 1	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Avalon Boulevard & SR-91 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	9.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.544

Intersection Setup

Name	Avalon Boulevard		Avalon Boulevard		SR-91 WB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name	Avalon Boulevard		Avalon Boulevard		SR-91 WB Ramps	
Base Volume Input [veh/h]	971	168	179	1156	389	606
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	971	168	179	1156	389	606
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	243	42	45	289	97	152
Total Analysis Volume [veh/h]	971	168	179	1156	389	606
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	4	0	0	8	2	0
Auxiliary Signal Groups						
Lead / Lag	-	-	-	-	Lead	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.5	0.0	0.0	3.5	3.5	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	31	0	0	31	29	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	2.5	2.5	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	C	R
C, Cycle Length [s]	40	40	40	40	40	40	40
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	19	19	19	19	12	12	12
g / C, Green / Cycle	0.47	0.47	0.47	0.47	0.30	0.30	0.30
(v / s)_i Volume / Saturation Flow Rate	0.19	0.11	0.16	0.23	0.19	0.20	0.21
s, saturation flow rate [veh/h]	5094	1589	1124	5094	1781	1620	1589
c, Capacity [veh/h]	2396	748	516	2396	545	495	486
d1, Uniform Delay [s]	6.97	6.30	11.71	7.29	11.90	12.18	12.24
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.11	0.15	0.40	0.15	1.11	1.58	1.70
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.41	0.22	0.35	0.48	0.61	0.67	0.68
d, Delay for Lane Group [s/veh]	7.08	6.45	12.11	7.44	13.01	13.76	13.94
Lane Group LOS	A	A	B	A	B	B	B
Critical Lane Group	No	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh]	1.22	0.60	0.55	1.53	2.15	2.25	2.27
50th-Percentile Queue Length [ft]	30.62	14.88	13.76	38.24	53.74	56.13	56.69
95th-Percentile Queue Length [veh]	2.20	1.07	0.99	2.75	3.87	4.04	4.08
95th-Percentile Queue Length [ft]	55.11	26.78	24.77	68.83	96.72	101.03	102.05

Movement, Approach, & Intersection Results

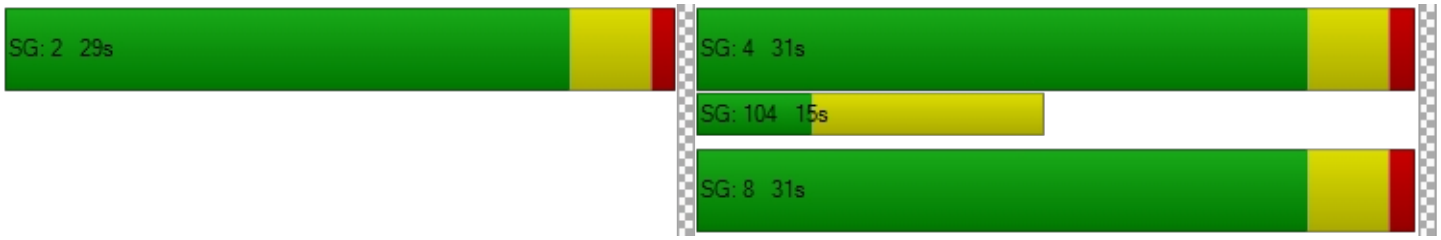
d_M, Delay for Movement [s/veh]	7.08	6.45	12.11	7.44	13.12	13.86
Movement LOS	A	A	B	A	B	B
d_A, Approach Delay [s/veh]	6.98		8.07		13.57	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	9.29					
Intersection LOS	A					
Intersection V/C	0.544					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.797
Crosswalk LOS	F	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.759	4.867	5.774
Bicycle LOS	E	E	F

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Avalon Boulevard & I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	8.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.576

Intersection Setup

Name	Avalon Boulevard			Avalon Boulevard			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Avalon Boulevard			Avalon Boulevard			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	475	1219	0	0	862	289	0	0	0	106	0	506
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	475	1219	0	0	862	289	0	0	0	106	0	506
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	119	305	0	0	216	72	0	0	0	27	0	127
Total Analysis Volume [veh/h]	475	1219	0	0	862	289	0	0	0	106	0	506
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss	Permiss	Permiss	Unsigna
Signal group	7	4	0	0	8	0	0	0	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	30	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	14	34	0	0	20	0	0	0	0	0	26	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	0	10	0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.5	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C		L	C
C, Cycle Length [s]	34	34	34		34	34
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	8	22	10		3	3
g / C, Green / Cycle	0.22	0.64	0.29		0.09	0.09
(v / s)_i Volume / Saturation Flow Rate	0.14	0.34	0.17		0.03	0.03
s, saturation flow rate [veh/h]	3459	3560	5094		1781	1781
c, Capacity [veh/h]	771	2284	1459		168	168
d1, Uniform Delay [s]	11.91	3.33	10.44		14.40	14.40
k, delay calibration	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	0.80	0.19	0.38		1.07	1.07
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.62	0.53	0.59		0.32	0.32
d, Delay for Lane Group [s/veh]	12.72	3.52	10.82		15.47	15.47
Lane Group LOS	B	A	B		B	B
Critical Lane Group	No	Yes	No		Yes	No
50th-Percentile Queue Length [veh]	1.31	0.53	1.38		0.36	0.36
50th-Percentile Queue Length [ft]	32.77	13.15	34.58		8.97	8.97
95th-Percentile Queue Length [veh]	2.36	0.95	2.49		0.65	0.65
95th-Percentile Queue Length [ft]	58.98	23.66	62.24		16.15	16.15

Movement, Approach, & Intersection Results

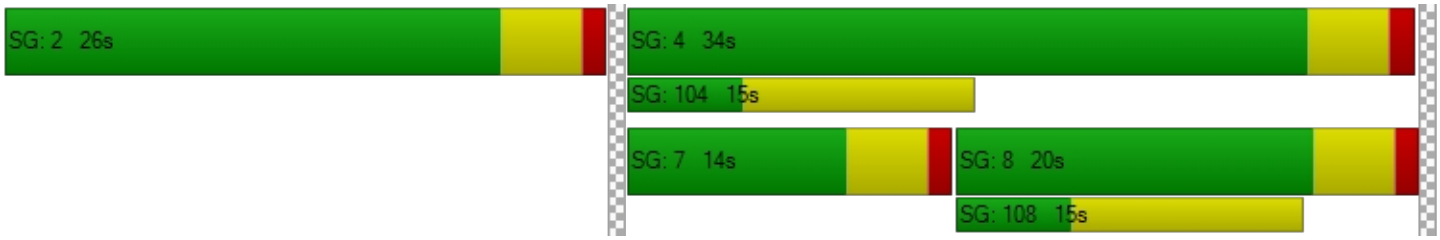
d_M, Delay for Movement [s/veh]	12.72	3.52	0.00	0.00	10.82	0.00	0.00	0.00	0.00	15.47	15.47	0.00
Movement LOS	B	A			B					B	B	
d_A, Approach Delay [s/veh]	6.10			10.82			0.00			15.47		
Approach LOS	A			B			A			B		
d_I, Intersection Delay [s/veh]	8.00											
Intersection LOS	A											
Intersection V/C	0.576											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.927	1.955
Crosswalk LOS	F	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	983	517	0	717
d_b, Bicycle Delay [s]	7.75	16.50	30.00	12.35
l_b,int, Bicycle LOS Score for Intersection	2.957	2.034	4.132	1.735
Bicycle LOS	C	B	D	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 16: Avalon Boulevard & I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	9.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.805

Intersection Setup

Name	Avalon Boulevard			Avalon Boulevard			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Avalon Boulevard			Avalon Boulevard			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	26	1115	140	0	616	355	505	32	594	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	26	1115	140	0	616	355	505	32	594	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	279	35	0	154	89	126	8	149	0	0	0
Total Analysis Volume [veh/h]	26	1115	140	0	616	355	505	32	594	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss
Signal group	7	4	0	0	8	0	0	6	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	5	0	0	0	0
Maximum Green [s]	30	30	0	0	30	0	0	30	0	0	0	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	10	30	0	0	20	0	0	30	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	0	0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Minimum Recall	No	No			No			No				
Maximum Recall	No	No			No			No				
Pedestrian Recall	No	No			No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	C	
C, Cycle Length [s]	31	31	31	31	31	31	
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	
g_i, Effective Green Time [s]	1	14	14	9	7	7	
g / C, Green / Cycle	0.03	0.46	0.46	0.28	0.24	0.24	
(v / s)_i Volume / Saturation Flow Rate	0.01	0.34	0.34	0.17	0.15	0.01	
s, saturation flow rate [veh/h]	1781	1870	1798	3560	3459	3560	
c, Capacity [veh/h]	59	863	830	1002	848	873	
d1, Uniform Delay [s]	14.55	6.76	6.77	9.58	10.23	8.82	
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	5.01	1.27	1.34	0.62	0.67	0.02	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.44	0.74	0.74	0.61	0.60	0.04	
d, Delay for Lane Group [s/veh]	19.56	8.03	8.11	10.20	10.91	8.84	
Lane Group LOS	B	A	A	B	B	A	
Critical Lane Group	No	No	Yes	No	Yes	No	
50th-Percentile Queue Length [veh]	0.22	1.95	1.90	1.29	1.12	0.06	
50th-Percentile Queue Length [ft]	5.58	48.68	47.44	32.17	28.06	1.48	
95th-Percentile Queue Length [veh]	0.40	3.50	3.42	2.32	2.02	0.11	
95th-Percentile Queue Length [ft]	10.04	87.62	85.39	57.90	50.51	2.66	

Movement, Approach, & Intersection Results

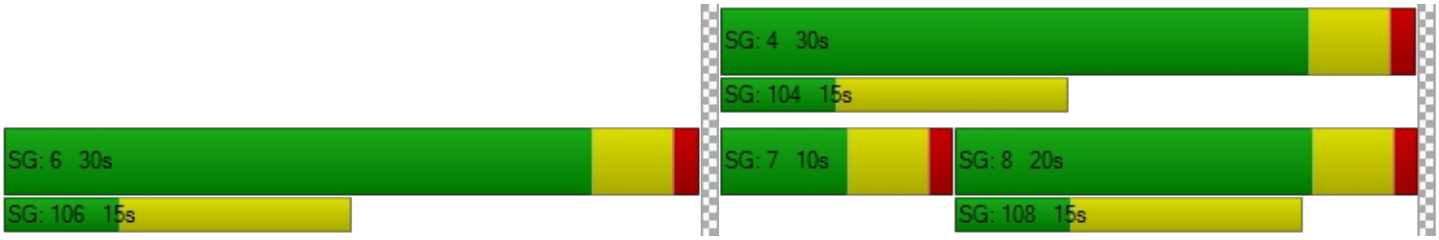
d_M, Delay for Movement [s/veh]	19.56	8.06	8.11	0.00	10.20	0.00	10.91	8.84	0.00	0.00	0.00	0.00
Movement LOS	B	A	A		B		B	A				
d_A, Approach Delay [s/veh]	8.30			10.20			10.78			0.00		
Approach LOS	A			B			B			A		
d_I, Intersection Delay [s/veh]	9.33											
Intersection LOS	A											
Intersection V/C	0.805											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.650	0.000	2.525	1.779
Crosswalk LOS	B	F	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	850	517	850	0
d_b, Bicycle Delay [s]	9.92	16.50	9.92	30.00
l_b,int, Bicycle LOS Score for Intersection	2.616	2.068	2.003	4.132
Bicycle LOS	B	B	B	D

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 17: Main Street & SR 91 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	14.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.696

Intersection Setup

Name	Main Street			Main Street			SR-91 WB Ramps			SR-91 WB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			No			Yes		

Volumes

Name	Main Street			Main Street			SR-91 WB Ramps			SR-91 WB Ramps		
Base Volume Input [veh/h]	0	565	110	66	528	0	0	0	0	483	0	409
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	565	110	66	528	0	0	0	0	483	0	409
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	141	28	17	132	0	0	0	0	121	0	102
Total Analysis Volume [veh/h]	0	565	110	66	528	0	0	0	0	483	0	409
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	7	4	0	3	8	0	0	0	0	2	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	30	30	0	0	0	0	30	0	0
Amber [s]	3.5	3.5	0.0	3.5	3.5	0.0	0.0	0.0	0.0	3.5	0.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	10	22	0	10	22	0	0	0	0	28	0	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	5	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	10	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	2.5	2.5	0.0	0.0	0.0	0.0	2.5	0.0	0.0
Minimum Recall	No	No		No	No					No		
Maximum Recall	No	No		No	No					No		
Pedestrian Recall	No	No		No	No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C		L	R
C, Cycle Length [s]	41	41	41	41	41		41	41
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	0	11	11	3	13		15	15
g / C, Green / Cycle	0.00	0.26	0.26	0.06	0.32		0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.00	0.19	0.19	0.04	0.15		0.27	0.26
s, saturation flow rate [veh/h]	1781	1870	1766	1781	3560		1781	1589
c, Capacity [veh/h]	0	484	457	116	1154		626	559
d1, Uniform Delay [s]	0.00	14.03	14.05	18.89	11.17		12.01	11.79
k, delay calibration	0.11	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	0.00	1.99	2.14	4.31	0.28		2.05	1.87
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.72	0.72	0.57	0.46		0.77	0.73
d, Delay for Lane Group [s/veh]	0.00	16.02	16.19	23.20	11.45		14.06	13.66
Lane Group LOS	A	B	B	C	B		B	B
Critical Lane Group	No	No	Yes	Yes	No		Yes	No
50th-Percentile Queue Length [veh]	0.00	2.67	2.56	0.68	1.57		3.40	2.82
50th-Percentile Queue Length [ft]	0.00	66.75	63.89	16.98	39.16		84.96	70.43
95th-Percentile Queue Length [veh]	0.00	4.81	4.60	1.22	2.82		6.12	5.07
95th-Percentile Queue Length [ft]	0.00	120.16	114.99	30.56	70.49		152.92	126.77

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	16.08	16.19	23.20	11.45	0.00	0.00	0.00	0.00	14.06	0.00	13.66
Movement LOS	A	B	B	C	B					B		B
d_A, Approach Delay [s/veh]	16.10			12.76			0.00			13.88		
Approach LOS	B			B			A			B		
d_I, Intersection Delay [s/veh]	14.26											
Intersection LOS	B											
Intersection V/C	0.696											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.268
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	583	583	0	0
d_b, Bicycle Delay [s]	15.05	15.05	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	2.116	2.050	4.132	4.132
Bicycle LOS	B	B	D	D

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 21: I-110 NB On-Ramp & 190th Street

Control Type:	Signalized	Delay (sec / veh):	6.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.481

Intersection Setup

Name	I-110 NB On Ramp			I-110 NB On Ramp			190th Street			190th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	No			Yes			No			No		

Volumes

Name	I-110 NB On Ramp			I-110 NB On Ramp			190th Street			190th Street		
Base Volume Input [veh/h]	0	0	0	0	0	0	164	913	0	0	592	237
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	164	913	0	0	592	237
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	41	228	0	0	148	59
Total Analysis Volume [veh/h]	0	0	0	0	0	0	164	913	0	0	592	237
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	0	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	0	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	30	30	0
Amber [s]	0.0	3.5	0.0	0.0	0.0	0.0	3.5	3.5	0.0	3.5	3.5	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	14	0	0	0	0	20	36	0	10	26	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.5	0.0	0.0	0.0	0.0	2.5	2.5	0.0	2.5	2.5	0.0
Minimum Recall		No					No	No		No	No	
Maximum Recall		No					No	No		No	No	
Pedestrian Recall		No					No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C		L	C	C	L	C	R
C, Cycle Length [s]	24		24	24	24	24	24	24
L, Total Lost Time per Cycle [s]	4.50		4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50		2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	0		3	11	11	0	7	7
g / C, Green / Cycle	0.00		0.14	0.45	0.45	0.00	0.31	0.31
(v / s)_i Volume / Saturation Flow Rate	0.00		0.05	0.24	0.24	0.00	0.17	0.15
s, saturation flow rate [veh/h]	1870		3459	1870	1870	1781	3560	1589
c, Capacity [veh/h]	1		484	836	836	1	1095	489
d1, Uniform Delay [s]	0.00		9.50	4.95	4.95	0.00	7.03	6.89
k, delay calibration	0.11		0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00		0.41	0.56	0.56	0.00	0.42	0.75
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00		0.34	0.55	0.55	0.00	0.54	0.48
d, Delay for Lane Group [s/veh]	0.00		9.91	5.51	5.51	0.00	7.45	7.64
Lane Group LOS	A		A	A	A	A	A	A
Critical Lane Group	No		No	Yes	No	No	No	No
50th-Percentile Queue Length [veh]	0.00		0.28	0.66	0.66	0.00	0.71	0.61
50th-Percentile Queue Length [ft]	0.00		7.03	16.38	16.38	0.00	17.65	15.13
95th-Percentile Queue Length [veh]	0.00		0.51	1.18	1.18	0.00	1.27	1.09
95th-Percentile Queue Length [ft]	0.00		12.65	29.48	29.48	0.00	31.76	27.24

Movement, Approach, & Intersection Results

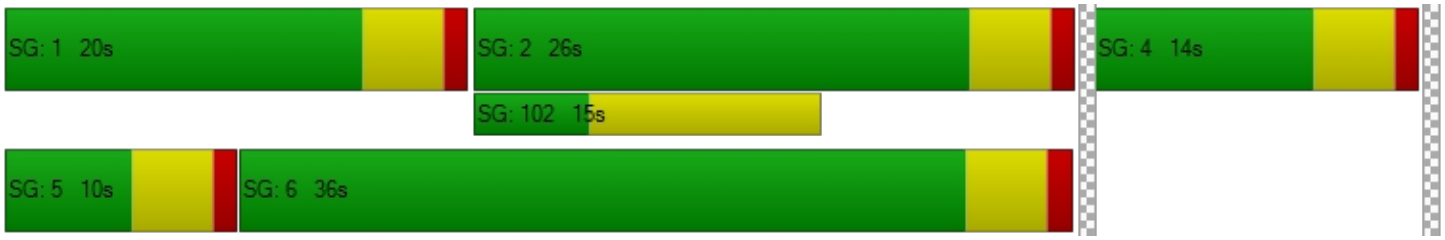
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00	9.91	5.51	5.51	0.00	7.45	7.64
Movement LOS	A	A	A				A	A	A	A	A	A
d_A, Approach Delay [s/veh]	0.00			0.00			6.18			7.50		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	6.76											
Intersection LOS	A											
Intersection V/C	0.481											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	21.68	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	1.891	0.000	0.000
Crosswalk LOS	F	A	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	317	0	1050	717
d_b, Bicycle Delay [s]	21.25	30.00	6.77	12.35
l_b,int, Bicycle LOS Score for Intersection	1.560	4.132	2.448	2.244
Bicycle LOS	A	D	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 22: I-110 SB Off-Ramp & 190th Street

Control Type:	Signalized	Delay (sec / veh):	14.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.828

Intersection Setup

Name	I-110 SB Off-Ramp		190th Street		190th Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	I-110 SB Off-Ramp		190th Street		190th Street	
Base Volume Input [veh/h]	278	747	0	761	617	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	278	747	0	761	617	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	70	187	0	190	154	0
Total Analysis Volume [veh/h]	278	747	0	761	617	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	8	0	0	6	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.5	0.0	0.0	3.5	3.5	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	39	0	0	21	21	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	2.5	2.5	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	46	46	46	46
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	24	24	13	13
g / C, Green / Cycle	0.52	0.52	0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.16	0.47	0.21	0.12
s, saturation flow rate [veh/h]	1781	1589	3560	5094
c, Capacity [veh/h]	930	830	1005	1438
d1, Uniform Delay [s]	6.23	9.91	15.09	13.50
k, delay calibration	0.11	0.24	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.18	7.89	1.19	0.20
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.30	0.90	0.76	0.43
d, Delay for Lane Group [s/veh]	6.40	17.80	16.28	13.70
Lane Group LOS	A	B	B	B
Critical Lane Group	No	Yes	Yes	No
50th-Percentile Queue Length [veh]	1.10	6.35	3.20	1.50
50th-Percentile Queue Length [ft]	27.61	158.69	80.09	37.39
95th-Percentile Queue Length [veh]	1.99	10.48	5.77	2.69
95th-Percentile Queue Length [ft]	49.70	261.98	144.16	67.30

Movement, Approach, & Intersection Results

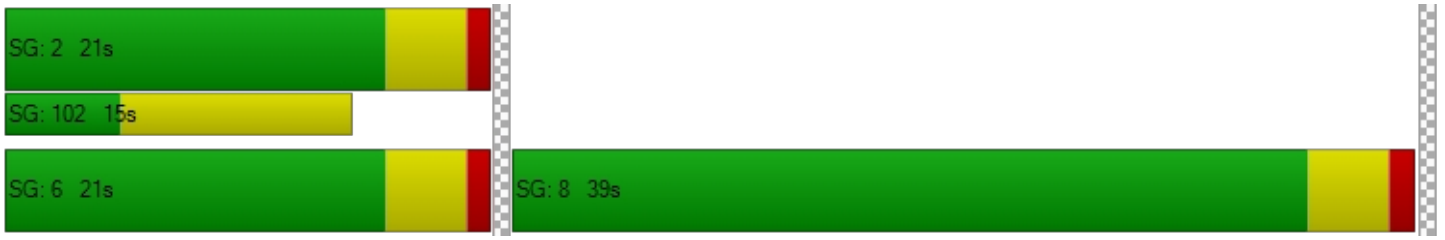
d_M, Delay for Movement [s/veh]	6.40	17.80	0.00	16.28	13.70	0.00
Movement LOS	A	B		B	B	
d_A, Approach Delay [s/veh]	14.71		16.28		13.70	
Approach LOS	B		B		B	
d_I, Intersection Delay [s/veh]	14.95					
Intersection LOS	B					
Intersection V/C	0.828					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	2.195	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.132	4.760	4.472
Bicycle LOS	D	E	E

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	All-way stop	Delay (sec / veh):	59.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.103

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	80	111	369	96	781	327
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	80	111	369	96	781	327
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	28	92	24	195	82
Total Analysis Volume [veh/h]	80	111	369	96	781	327
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	458	502	455	486	554	558
Degree of Utilization, x	0.17	0.22	0.81	0.20	1.10	0.99

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.63	0.84	7.56	0.73	17.99	14.19
95th-Percentile Queue Length [ft]	15.67	20.93	189.01	18.22	449.70	354.72
Approach Delay [s/veh]	12.03		31.53		79.14	
Approach LOS	B		D		F	
Intersection Delay [s/veh]	59.33					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 27: Figueroa Street & I-110 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	17.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.732

Intersection Setup

Name	Figueroa Street		Figueroa Street		I-110 NB Ramps	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name	Figueroa Street		Figueroa Street		I-110 NB Ramps	
Base Volume Input [veh/h]	692	605	415	194	605	225
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	692	605	415	194	605	225
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	173	151	104	49	151	56
Total Analysis Volume [veh/h]	692	605	415	194	605	225
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	7	4	8	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	5	5	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.5	3.5	3.5	0.0	3.5	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	18	38	20	0	22	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	10	10	0	10	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	2.5	0.0	2.5	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	C
C, Cycle Length [s]	53	53	53	53	53	53
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	14	28	10	10	16	16
g / C, Green / Cycle	0.26	0.53	0.18	0.18	0.30	0.30
(v / s)_i Volume / Saturation Flow Rate	0.20	0.17	0.12	0.12	0.24	0.24
s, saturation flow rate [veh/h]	3459	3560	3560	1589	1781	1670
c, Capacity [veh/h]	908	1875	639	285	542	508
d1, Uniform Delay [s]	18.09	7.18	20.28	20.41	16.88	17.05
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.35	0.10	1.12	2.84	2.47	3.02
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.76	0.32	0.65	0.68	0.78	0.80
d, Delay for Lane Group [s/veh]	19.44	7.28	21.40	23.25	19.35	20.07
Lane Group LOS	B	A	C	C	B	C
Critical Lane Group	Yes	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh]	3.63	1.52	2.26	2.26	4.45	4.41
50th-Percentile Queue Length [ft]	90.64	37.95	56.58	56.52	111.26	110.24
95th-Percentile Queue Length [veh]	6.53	2.73	4.07	4.07	7.91	7.85
95th-Percentile Queue Length [ft]	163.15	68.30	101.84	101.73	197.75	196.33

Movement, Approach, & Intersection Results

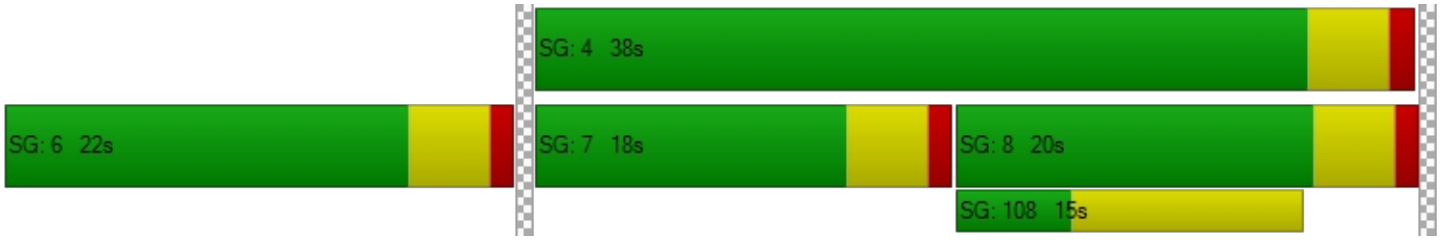
d_M, Delay for Movement [s/veh]	19.44	7.28	21.40	23.25	19.57	20.07
Movement LOS	B	A	C	C	B	C
d_A, Approach Delay [s/veh]	13.77		21.99		19.71	
Approach LOS	B		C		B	
d_I, Intersection Delay [s/veh]	17.40					
Intersection LOS	B					
Intersection V/C	0.732					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.530
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	5.202	4.635	5.502
Bicycle LOS	F	E	F

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 28: SR 91 EB Ramps & Albertoni Street

Control Type:	Signalized	Delay (sec / veh):	12.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.609

Intersection Setup

Name	SR 91 EB Ramps		Albertoni Street		Albertoni Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	SR 91 EB Ramps		Albertoni Street		Albertoni Street	
Base Volume Input [veh/h]	281	255	282	331	500	89
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	281	255	282	331	500	89
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	70	64	71	83	125	22
Total Analysis Volume [veh/h]	281	255	282	331	500	89
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal group	8	0	1	6	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.5	0.0	3.5	3.5	3.5	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	23	0	14	37	23	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	2.5	2.5	2.5	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	L	C	C	C
C, Cycle Length [s]	36	36	36	36	36	36
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	9	9	5	19	9	9
g / C, Green / Cycle	0.24	0.24	0.15	0.51	0.24	0.24
(v / s)_i Volume / Saturation Flow Rate	0.16	0.16	0.08	0.09	0.16	0.17
s, saturation flow rate [veh/h]	1781	1589	3459	3560	1870	1775
c, Capacity [veh/h]	426	381	503	1829	458	434
d1, Uniform Delay [s]	12.52	12.56	14.49	4.75	12.34	12.46
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.74	2.05	0.98	0.05	1.52	1.86
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.66	0.67	0.56	0.18	0.64	0.68
d, Delay for Lane Group [s/veh]	14.26	14.60	15.47	4.80	13.86	14.33
Lane Group LOS	B	B	B	A	B	B
Critical Lane Group	No	Yes	Yes	No	No	Yes
50th-Percentile Queue Length [veh]	1.80	1.67	0.95	0.38	1.85	1.90
50th-Percentile Queue Length [ft]	45.12	41.78	23.74	9.54	46.24	47.43
95th-Percentile Queue Length [veh]	3.25	3.01	1.71	0.69	3.33	3.42
95th-Percentile Queue Length [ft]	81.21	75.21	42.72	17.17	83.23	85.38

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	14.26	14.60	15.47	4.80	14.05	14.33
Movement LOS	B	B	B	A	B	B
d_A, Approach Delay [s/veh]	14.42		9.71		14.09	
Approach LOS	B		A		B	
d_I, Intersection Delay [s/veh]	12.65					
Intersection LOS	B					
Intersection V/C	0.609					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	2.333	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.132	4.638	4.618
Bicycle LOS	D	E	E

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 2: Main Street & I-405 NB Off-Ramp

Control Type:	Signalized	Delay (sec / veh):	13.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.776

Intersection Setup

Name	Main Street			Main Street			I-405 NB Off-Ramp			I-405 NB Off-Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Main Street			Main Street			I-405 NB Off-Ramp			I-405 NB Off-Ramp		
Base Volume Input [veh/h]	21	713	0	0	1320	93	0	0	0	102	122	269
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	21	713	0	0	1320	93	0	0	0	102	122	269
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	178	0	0	330	23	0	0	0	26	31	67
Total Analysis Volume [veh/h]	21	713	0	0	1320	93	0	0	0	102	122	269
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	7	4	0	0	8	0	0	0	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	30	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	10	42	0	0	32	0	0	0	0	0	18	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	0	10	0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.5	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C		C	C
C, Cycle Length [s]	49	49	49	49		49	49
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	1	28	22	22		12	12
g / C, Green / Cycle	0.03	0.57	0.46	0.46		0.24	0.24
(v / s)_i Volume / Saturation Flow Rate	0.01	0.20	0.38	0.39		0.12	0.19
s, saturation flow rate [veh/h]	1781	3560	1870	1828		1828	1446
c, Capacity [veh/h]	46	2045	853	834		441	349
d1, Uniform Delay [s]	23.43	5.53	11.59	11.75		16.01	17.26
k, delay calibration	0.11	0.11	0.16	0.17		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	6.94	0.10	3.13	3.87		0.91	3.63
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.46	0.35	0.83	0.85		0.51	0.77
d, Delay for Lane Group [s/veh]	30.36	5.63	14.72	15.63		16.91	20.88
Lane Group LOS	C	A	B	B		B	C
Critical Lane Group	Yes	No	No	Yes		No	Yes
50th-Percentile Queue Length [veh]	0.31	1.31	5.81	6.04		1.99	2.79
50th-Percentile Queue Length [ft]	7.67	32.69	145.33	151.00		49.82	69.69
95th-Percentile Queue Length [veh]	0.55	2.35	9.77	10.07		3.59	5.02
95th-Percentile Queue Length [ft]	13.81	58.84	244.18	251.77		89.68	125.44

Movement, Approach, & Intersection Results

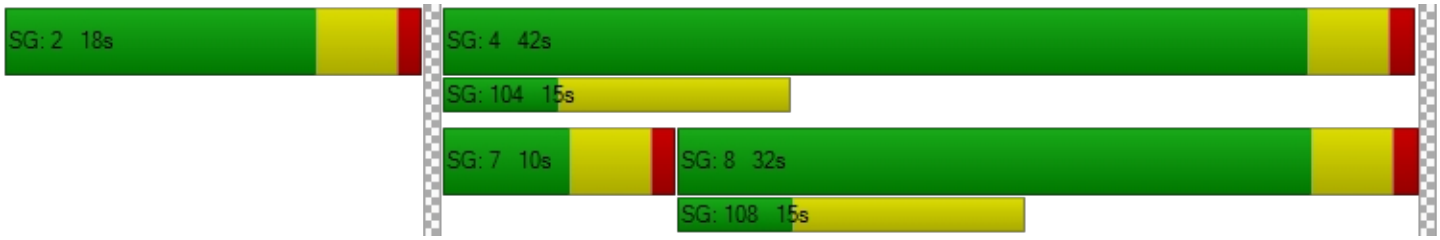
d_M, Delay for Movement [s/veh]	30.36	5.63	0.00	0.00	15.14	15.63	0.00	0.00	0.00	16.91	16.91	20.88
Movement LOS	C	A			B	B				B	B	C
d_A, Approach Delay [s/veh]	6.34			15.18			0.00			19.08		
Approach LOS	A			B			A			B		
d_I, Intersection Delay [s/veh]	13.45											
Intersection LOS	B											
Intersection V/C	0.776											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.811	1.936
Crosswalk LOS	F	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1250	917	0	450
d_b, Bicycle Delay [s]	4.22	8.80	30.00	18.02
l_b,int, Bicycle LOS Score for Intersection	2.165	2.725	4.132	1.966
Bicycle LOS	B	B	D	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Main Street & I-405 SB On Ramp

Control Type:	Signalized	Delay (sec / veh):	14.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.765

Intersection Setup

Name	Main Street			Main Street			I-405 SB On Ramp			I-405 SB On Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			30.00			30.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No			No			No				
Crosswalk		Yes			No			Yes			Yes	

Volumes

Name	Main Street			Main Street			I-405 SB On Ramp			I-405 SB On Ramp		
Base Volume Input [veh/h]	0	677	150	308	1115	0	62	279	42	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	677	150	308	1115	0	62	279	42	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	169	38	77	279	0	16	70	11	0	0	0
Total Analysis Volume [veh/h]	0	677	150	308	1115	0	62	279	42	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	4	0	3	8	0	0	6	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	5	0	5	5	0	0	5	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	0	30	0	0	0	0
Amber [s]	0.0	3.5	0.0	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	0	20	0	20	40	0	0	20	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	0	0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.5	0.0	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No			No				
Maximum Recall		No		No	No			No				
Pedestrian Recall		No		No	No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	L	C	
C, Cycle Length [s]	51	51	51	51	51	51	
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	
g_i, Effective Green Time [s]	15	15	11	30	11	11	
g / C, Green / Cycle	0.30	0.30	0.22	0.60	0.22	0.22	
(v / s)_i Volume / Saturation Flow Rate	0.22	0.24	0.17	0.31	0.03	0.18	
s, saturation flow rate [veh/h]	1870	1757	1781	3560	1781	1828	
c, Capacity [veh/h]	554	521	384	2138	396	406	
d1, Uniform Delay [s]	16.13	16.43	18.88	5.89	15.91	18.63	
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	2.03	2.79	3.93	0.20	0.18	3.49	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.75	0.79	0.80	0.52	0.16	0.79	
d, Delay for Lane Group [s/veh]	18.16	19.23	22.81	6.09	16.09	22.12	
Lane Group LOS	B	B	C	A	B	C	
Critical Lane Group	No	Yes	Yes	No	No	Yes	
50th-Percentile Queue Length [veh]	4.04	4.20	3.46	2.28	0.54	3.53	
50th-Percentile Queue Length [ft]	100.93	104.95	86.39	57.01	13.45	88.31	
95th-Percentile Queue Length [veh]	7.27	7.56	6.22	4.10	0.97	6.36	
95th-Percentile Queue Length [ft]	181.67	188.91	155.50	102.62	24.20	158.95	

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	18.58	19.23	22.81	6.09	0.00	16.09	22.12	22.12	0.00	0.00	0.00
Movement LOS		B	B	C	A		B	C	C			
d_A, Approach Delay [s/veh]	18.69			9.71			21.14			0.00		
Approach LOS	B			A			C			A		
d_I, Intersection Delay [s/veh]	14.20											
Intersection LOS	B											
Intersection V/C	0.765											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.595	0.000	1.882	2.123
Crosswalk LOS	B	F	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	517	1183	517	0
d_b, Bicycle Delay [s]	16.50	5.00	16.50	30.00
l_b,int, Bicycle LOS Score for Intersection	2.242	2.734	2.192	4.132
Bicycle LOS	B	B	B	D

Sequence

Ring 1	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Avalon Boulevard & SR-91 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	8.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.528

Intersection Setup

Name	Avalon Boulevard		Avalon Boulevard		SR-91 WB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name	Avalon Boulevard		Avalon Boulevard		SR-91 WB Ramps	
Base Volume Input [veh/h]	1262	230	165	1161	421	453
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1262	230	165	1161	421	453
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	316	58	41	290	105	113
Total Analysis Volume [veh/h]	1262	230	165	1161	421	453
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	4	0	0	8	2	0
Auxiliary Signal Groups						
Lead / Lag	-	-	-	-	Lead	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.5	0.0	0.0	3.5	3.5	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	28	0	0	28	32	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	2.5	2.5	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	C	R
C, Cycle Length [s]	42	42	42	42	42	42	42
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	22	22	22	22	11	11	11
g / C, Green / Cycle	0.52	0.52	0.52	0.52	0.27	0.27	0.27
(v / s)_i Volume / Saturation Flow Rate	0.25	0.14	0.19	0.23	0.17	0.17	0.18
s, saturation flow rate [veh/h]	5094	1589	853	5094	1781	1665	1589
c, Capacity [veh/h]	2645	825	443	2645	476	445	425
d1, Uniform Delay [s]	6.47	5.69	12.12	6.31	13.59	13.71	13.79
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.13	0.18	0.52	0.12	1.36	1.63	1.85
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.48	0.28	0.37	0.44	0.63	0.65	0.67
d, Delay for Lane Group [s/veh]	6.61	5.88	12.64	6.42	14.95	15.33	15.64
Lane Group LOS	A	A	B	A	B	B	B
Critical Lane Group	Yes	No	No	No	No	No	Yes
50th-Percentile Queue Length [veh]	1.55	0.77	0.55	1.39	2.22	2.20	2.20
50th-Percentile Queue Length [ft]	38.80	19.31	13.74	34.75	55.42	55.08	54.88
95th-Percentile Queue Length [veh]	2.79	1.39	0.99	2.50	3.99	3.97	3.95
95th-Percentile Queue Length [ft]	69.84	34.75	24.74	62.55	99.75	99.14	98.78

Movement, Approach, & Intersection Results

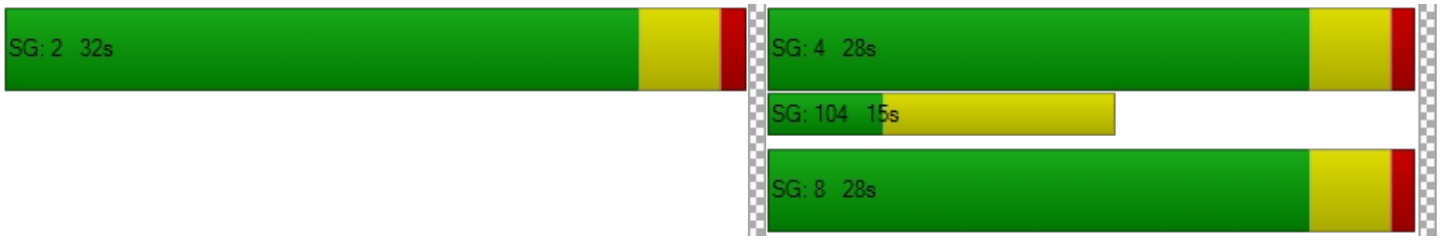
d_M, Delay for Movement [s/veh]	6.61	5.88	12.64	6.42	15.07	15.53
Movement LOS	A	A	B	A	B	B
d_A, Approach Delay [s/veh]	6.50		7.20		15.30	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	8.83					
Intersection LOS	A					
Intersection V/C	0.528					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.763
Crosswalk LOS	F	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.953	4.862	5.575
Bicycle LOS	E	E	F

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Avalon Boulevard & I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	9.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.615

Intersection Setup

Name	Avalon Boulevard			Avalon Boulevard			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Avalon Boulevard			Avalon Boulevard			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	348	1197	0	0	1516	535	0	0	0	186	2	502
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	348	1197	0	0	1516	535	0	0	0	186	2	502
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	87	299	0	0	379	134	0	0	0	47	1	126
Total Analysis Volume [veh/h]	348	1197	0	0	1516	535	0	0	0	186	2	502
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss	Permiss	Permiss	Unsigna
Signal group	7	4	0	0	8	0	0	0	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	30	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	15	50	0	0	35	0	0	0	0	0	10	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	0	10	0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.5	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C		L	C
C, Cycle Length [s]	45	45	45		45	45
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	7	32	20		5	5
g / C, Green / Cycle	0.16	0.70	0.44		0.10	0.10
(v / s)_i Volume / Saturation Flow Rate	0.10	0.34	0.30		0.05	0.05
s, saturation flow rate [veh/h]	3459	3560	5094		1781	1783
c, Capacity [veh/h]	551	2492	2247		179	180
d1, Uniform Delay [s]	17.75	3.06	10.04		19.28	19.28
k, delay calibration	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	1.20	0.14	0.36		2.36	2.36
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.63	0.48	0.67		0.52	0.52
d, Delay for Lane Group [s/veh]	18.95	3.21	10.40		21.64	21.63
Lane Group LOS	B	A	B		C	C
Critical Lane Group	Yes	No	Yes		Yes	No
50th-Percentile Queue Length [veh]	1.57	0.84	3.04		0.95	0.95
50th-Percentile Queue Length [ft]	39.28	21.00	75.89		23.71	23.72
95th-Percentile Queue Length [veh]	2.83	1.51	5.46		1.71	1.71
95th-Percentile Queue Length [ft]	70.70	37.80	136.60		42.68	42.70

Movement, Approach, & Intersection Results

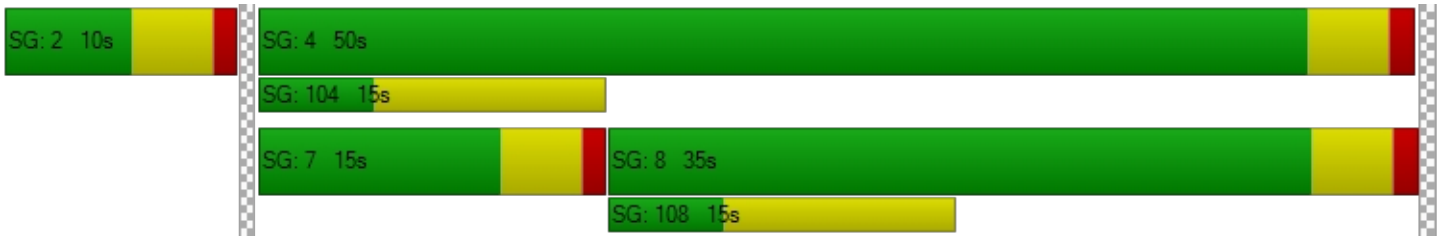
d_M, Delay for Movement [s/veh]	18.95	3.21	0.00	0.00	10.40	0.00	0.00	0.00	0.00	21.63	21.63	0.00
Movement LOS	B	A			B					C	C	
d_A, Approach Delay [s/veh]	6.75			10.40			0.00			21.63		
Approach LOS	A			B			A			C		
d_I, Intersection Delay [s/veh]	9.32											
Intersection LOS	A											
Intersection V/C	0.615											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.866	1.982
Crosswalk LOS	F	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1517	1017	0	183
d_b, Bicycle Delay [s]	1.75	7.25	30.00	24.75
l_b,int, Bicycle LOS Score for Intersection	2.834	2.393	4.132	1.870
Bicycle LOS	C	B	D	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 16: Avalon Boulevard & I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	9.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.670

Intersection Setup

Name	Avalon Boulevard			Avalon Boulevard			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Avalon Boulevard			Avalon Boulevard			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	53	1164	186	0	1179	528	345	226	457	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	53	1164	186	0	1179	528	345	226	457	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	291	47	0	295	132	86	57	114	0	0	0
Total Analysis Volume [veh/h]	53	1164	186	0	1179	528	345	226	457	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss
Signal group	7	4	0	0	8	0	0	6	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	5	0	0	0	0
Maximum Green [s]	30	30	0	0	30	0	0	30	0	0	0	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	10	40	0	0	30	0	0	20	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	0	0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Minimum Recall	No	No			No			No				
Maximum Recall	No	No			No			No				
Pedestrian Recall	No	No			No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	C	
C, Cycle Length [s]	40	40	40	40	40	40	
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	
g_i, Effective Green Time [s]	2	24	24	18	7	7	
g / C, Green / Cycle	0.06	0.60	0.60	0.43	0.18	0.18	
(v / s)_i Volume / Saturation Flow Rate	0.03	0.37	0.37	0.33	0.10	0.06	
s, saturation flow rate [veh/h]	1781	1870	1782	3560	3459	3560	
c, Capacity [veh/h]	100	1123	1070	1543	614	632	
d1, Uniform Delay [s]	18.62	5.12	5.15	9.74	15.25	14.66	
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	4.24	0.55	0.59	0.81	0.81	0.34	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.53	0.61	0.62	0.76	0.56	0.36	
d, Delay for Lane Group [s/veh]	22.87	5.66	5.73	10.55	16.06	15.00	
Lane Group LOS	C	A	A	B	B	B	
Critical Lane Group	No	No	Yes	No	Yes	No	
50th-Percentile Queue Length [veh]	0.54	1.92	1.87	3.25	1.29	0.80	
50th-Percentile Queue Length [ft]	13.50	48.00	46.65	81.17	32.19	19.94	
95th-Percentile Queue Length [veh]	0.97	3.46	3.36	5.84	2.32	1.44	
95th-Percentile Queue Length [ft]	24.31	86.40	83.98	146.10	57.95	35.89	

Movement, Approach, & Intersection Results

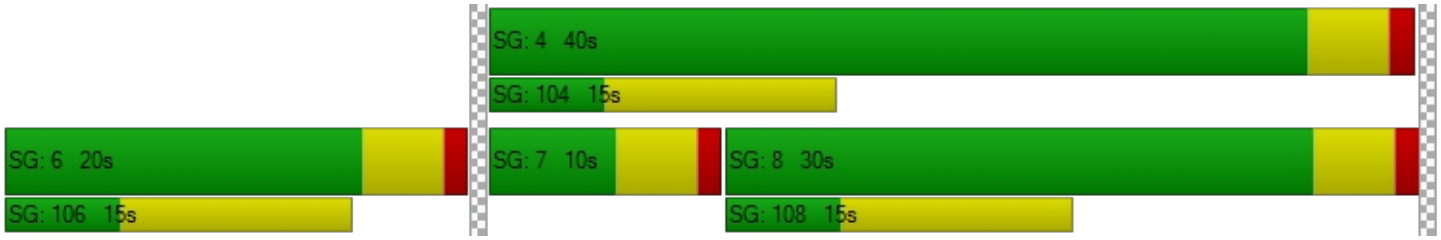
d_M, Delay for Movement [s/veh]	22.87	5.69	5.73	0.00	10.55	0.00	16.06	15.00	0.00	0.00	0.00	0.00
Movement LOS	C	A	A		B		B	B				
d_A, Approach Delay [s/veh]	6.35			10.55			15.64			0.00		
Approach LOS	A			B			B			A		
d_I, Intersection Delay [s/veh]	9.60											
Intersection LOS	A											
Intersection V/C	0.670											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.784	0.000	2.535	1.896
Crosswalk LOS	C	F	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1183	850	517	0
d_b, Bicycle Delay [s]	5.00	9.92	16.50	30.00
l_b,int, Bicycle LOS Score for Intersection	2.717	2.532	2.031	4.132
Bicycle LOS	B	B	B	D

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 17: Main Street & SR 91 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	13.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.689

Intersection Setup

Name	Main Street			Main Street			SR-91 WB Ramps			SR-91 WB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			No			Yes		

Volumes

Name	Main Street			Main Street			SR-91 WB Ramps			SR-91 WB Ramps		
Base Volume Input [veh/h]	1	630	137	109	787	0	0	0	0	255	0	329
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	630	137	109	787	0	0	0	0	255	0	329
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	158	34	27	197	0	0	0	0	64	0	82
Total Analysis Volume [veh/h]	1	630	137	109	787	0	0	0	0	255	0	329
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	7	4	0	3	8	0	0	0	0	2	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	30	30	0	0	0	0	30	0	0
Amber [s]	3.5	3.5	0.0	3.5	3.5	0.0	0.0	0.0	0.0	3.5	0.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	10	25	0	11	26	0	0	0	0	24	0	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	5	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	10	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	2.5	2.5	0.0	0.0	0.0	0.0	2.5	0.0	0.0
Minimum Recall	No	No		No	No					No		
Maximum Recall	No	No		No	No					No		
Pedestrian Recall	No	No		No	No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C		L	R
C, Cycle Length [s]	40	40	40	40	40		40	40
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	0	11	11	4	15		11	11
g / C, Green / Cycle	0.00	0.29	0.29	0.09	0.38		0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.00	0.21	0.21	0.06	0.22		0.14	0.21
s, saturation flow rate [veh/h]	1781	1870	1756	1781	3560		1781	1589
c, Capacity [veh/h]	3	544	511	159	1349		498	445
d1, Uniform Delay [s]	19.81	12.65	12.66	17.54	9.84		12.02	12.99
k, delay calibration	0.11	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	61.19	1.86	2.00	5.14	0.40		0.82	2.44
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.35	0.73	0.73	0.69	0.58		0.51	0.74
d, Delay for Lane Group [s/veh]	81.00	14.52	14.67	22.68	10.24		12.84	15.43
Lane Group LOS	F	B	B	C	B		B	B
Critical Lane Group	No	No	Yes	Yes	No		No	Yes
50th-Percentile Queue Length [veh]	0.06	2.74	2.60	1.05	2.07		1.61	2.39
50th-Percentile Queue Length [ft]	1.41	68.52	65.03	26.34	51.74		40.28	59.74
95th-Percentile Queue Length [veh]	0.10	4.93	4.68	1.90	3.73		2.90	4.30
95th-Percentile Queue Length [ft]	2.54	123.33	117.05	47.42	93.13		72.50	107.53

Movement, Approach, & Intersection Results

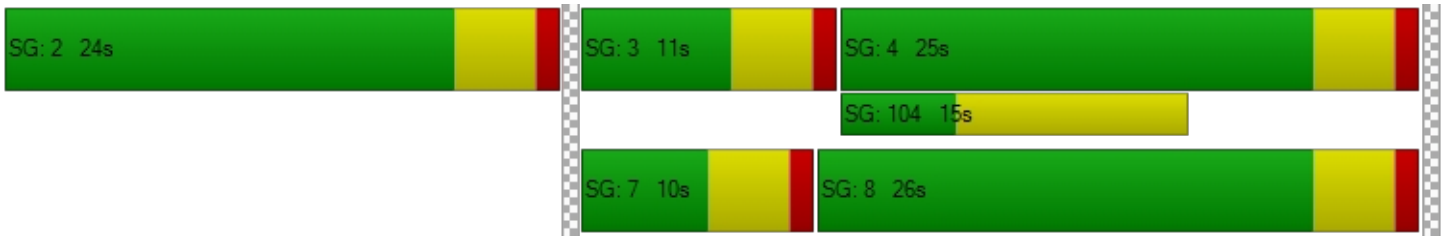
d_M, Delay for Movement [s/veh]	81.00	14.57	14.67	22.68	10.24	0.00	0.00	0.00	0.00	12.84	0.00	15.43
Movement LOS	F	B	B	C	B					B		B
d_A, Approach Delay [s/veh]	14.68			11.76			0.00			14.30		
Approach LOS	B			B			A			B		
d_I, Intersection Delay [s/veh]	13.41											
Intersection LOS	B											
Intersection V/C	0.689											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.191
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	683	717	0	0
d_b, Bicycle Delay [s]	13.00	12.35	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	2.193	2.299	4.132	4.132
Bicycle LOS	B	B	D	D

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 21: I-110 NB On-Ramp & 190th Street

Control Type:	Signalized	Delay (sec / veh):	7.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.586

Intersection Setup

Name	I-110 NB On Ramp			I-110 NB On Ramp			190th Street			190th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	No			Yes			No			No		

Volumes

Name	I-110 NB On Ramp			I-110 NB On Ramp			190th Street			190th Street		
Base Volume Input [veh/h]	0	0	0	0	0	0	459	1336	0	0	743	327
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	459	1336	0	0	743	327
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	115	334	0	0	186	82
Total Analysis Volume [veh/h]	0	0	0	0	0	0	459	1336	0	0	743	327
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	0	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	0	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	30	30	0
Amber [s]	0.0	3.5	0.0	0.0	0.0	0.0	3.5	3.5	0.0	3.5	3.5	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	17	0	0	0	0	21	33	0	10	22	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.5	0.0	0.0	0.0	0.0	2.5	2.5	0.0	2.5	2.5	0.0
Minimum Recall		No					No	No		No	No	
Maximum Recall		No					No	No		No	No	
Pedestrian Recall		No					No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C		L	C	C	L	C	R
C, Cycle Length [s]	31		31	31	31	31	31	31
L, Total Lost Time per Cycle [s]	4.50		4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50		2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	0		7	17	17	0	10	10
g / C, Green / Cycle	0.00		0.22	0.56	0.56	0.00	0.34	0.34
(v / s)_i Volume / Saturation Flow Rate	0.00		0.13	0.36	0.36	0.00	0.21	0.21
s, saturation flow rate [veh/h]	1870		3459	1870	1870	1781	3560	1589
c, Capacity [veh/h]	0		777	1051	1051	0	1201	536
d1, Uniform Delay [s]	0.00		10.69	4.61	4.61	0.00	8.56	8.53
k, delay calibration	0.11		0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00		0.72	0.64	0.64	0.00	0.52	1.13
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00		0.59	0.64	0.64	0.00	0.62	0.61
d, Delay for Lane Group [s/veh]	0.00		11.41	5.25	5.25	0.00	9.08	9.65
Lane Group LOS	A		B	A	A	A	A	A
Critical Lane Group	No		No	Yes	No	No	No	No
50th-Percentile Queue Length [veh]	0.00		1.07	1.09	1.09	0.00	1.39	1.31
50th-Percentile Queue Length [ft]	0.00		26.72	27.24	27.24	0.00	34.85	32.84
95th-Percentile Queue Length [veh]	0.00		1.92	1.96	1.96	0.00	2.51	2.36
95th-Percentile Queue Length [ft]	0.00		48.09	49.04	49.04	0.00	62.73	59.11

Movement, Approach, & Intersection Results

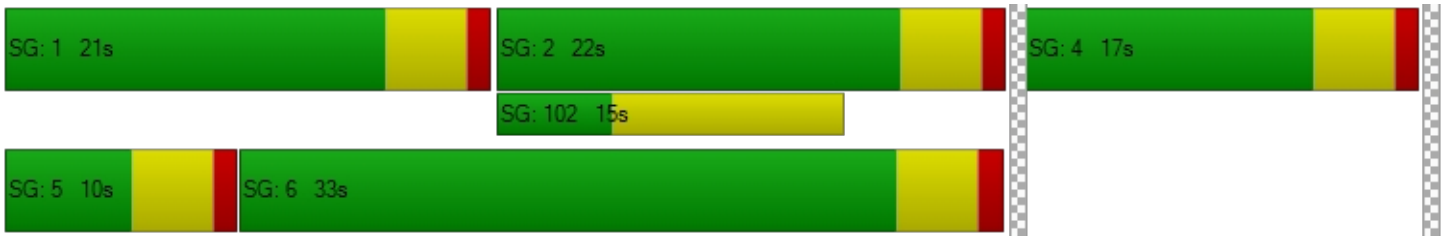
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00	11.41	5.25	5.25	0.00	9.08	9.65
Movement LOS	A	A	A				B	A	A	A	A	A
d_A, Approach Delay [s/veh]	0.00			0.00			6.82			9.26		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	7.73											
Intersection LOS	A											
Intersection V/C	0.586											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	21.68	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	2.079	0.000	0.000
Crosswalk LOS	F	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	417	0	950	583
d_b, Bicycle Delay [s]	18.80	30.00	8.27	15.05
l_b,int, Bicycle LOS Score for Intersection	1.560	4.132	3.040	2.442
Bicycle LOS	A	D	C	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 22: I-110 SB Off-Ramp & 190th Street

Control Type:	Signalized	Delay (sec / veh):	13.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.819

Intersection Setup

Name	I-110 SB Off-Ramp		190th Street		190th Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	I-110 SB Off-Ramp		190th Street		190th Street	
Base Volume Input [veh/h]	385	471	0	1419	737	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	385	471	0	1419	737	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	96	118	0	355	184	0
Total Analysis Volume [veh/h]	385	471	0	1419	737	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	8	0	0	6	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.5	0.0	0.0	3.5	3.5	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	26	0	0	34	34	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	2.5	2.5	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	53	53	53	53
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	19	19	25	25
g / C, Green / Cycle	0.35	0.35	0.48	0.48
(v / s)_i Volume / Saturation Flow Rate	0.22	0.30	0.40	0.14
s, saturation flow rate [veh/h]	1781	1589	3560	5094
c, Capacity [veh/h]	631	563	1695	2425
d1, Uniform Delay [s]	14.10	15.71	12.09	8.50
k, delay calibration	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.96	3.39	1.16	0.07
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.61	0.84	0.84	0.30
d, Delay for Lane Group [s/veh]	15.06	19.09	13.26	8.57
Lane Group LOS	B	B	B	A
Critical Lane Group	No	Yes	Yes	No
50th-Percentile Queue Length [veh]	3.41	4.94	5.94	1.40
50th-Percentile Queue Length [ft]	85.19	123.59	148.47	34.88
95th-Percentile Queue Length [veh]	6.13	8.59	9.94	2.51
95th-Percentile Queue Length [ft]	153.34	214.75	248.39	62.78

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	15.06	19.09	0.00	13.26	8.57	0.00
Movement LOS	B	B		B	A	
d_A, Approach Delay [s/veh]	17.28		13.26		8.57	
Approach LOS	B		B		A	
d_I, Intersection Delay [s/veh]	13.25					
Intersection LOS	B					
Intersection V/C	0.819					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.113	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
I_b,int, Bicycle LOS Score for Intersection	4.132	5.303	4.538
Bicycle LOS	D	F	E

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	All-way stop	Delay (sec / veh):	131.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.598

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	62	539	725	171	334	261
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	62	539	725	171	334	261
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	135	181	43	84	65
Total Analysis Volume [veh/h]	62	539	725	171	334	261
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	474	539	725	484	439	503
Degree of Utilization, x	0.13	1.03	1.60	0.35	0.68	0.59

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.45	15.33	40.61	1.57	4.93	3.79
95th-Percentile Queue Length [ft]	11.20	383.35	1015.32	39.37	123.31	94.64
Approach Delay [s/veh]	67.67		245.08		23.08	
Approach LOS	F		F		C	
Intersection Delay [s/veh]	130.97					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 27: Figueroa Street & I-110 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	17.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.730

Intersection Setup

Name	Figueroa Street		Figueroa Street		I-110 NB Ramps	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name	Figueroa Street		Figueroa Street		I-110 NB Ramps	
Base Volume Input [veh/h]	508	424	897	303	447	139
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	508	424	897	303	447	139
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	127	106	224	76	112	35
Total Analysis Volume [veh/h]	508	424	897	303	447	139
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	7	4	8	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	5	5	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.5	3.5	3.5	0.0	3.5	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	16	41	25	0	19	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	10	10	0	10	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	2.5	0.0	2.5	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	C
C, Cycle Length [s]	54	54	54	54	54	54
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	11	33	18	18	12	12
g / C, Green / Cycle	0.20	0.61	0.33	0.33	0.22	0.22
(v / s)_i Volume / Saturation Flow Rate	0.15	0.12	0.25	0.19	0.17	0.17
s, saturation flow rate [veh/h]	3459	3560	3560	1589	1781	1682
c, Capacity [veh/h]	699	2177	1162	519	397	375
d1, Uniform Delay [s]	20.25	4.65	16.47	15.22	19.73	19.74
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.46	0.04	1.12	1.05	3.00	3.20
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.73	0.19	0.77	0.58	0.76	0.76
d, Delay for Lane Group [s/veh]	21.71	4.70	17.59	16.27	22.73	22.94
Lane Group LOS	C	A	B	B	C	C
Critical Lane Group	Yes	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh]	2.86	0.73	4.53	2.87	3.52	3.36
50th-Percentile Queue Length [ft]	71.44	18.17	113.29	71.69	88.09	83.93
95th-Percentile Queue Length [veh]	5.14	1.31	8.02	5.16	6.34	6.04
95th-Percentile Queue Length [ft]	128.60	32.70	200.57	129.04	158.57	151.07

Movement, Approach, & Intersection Results

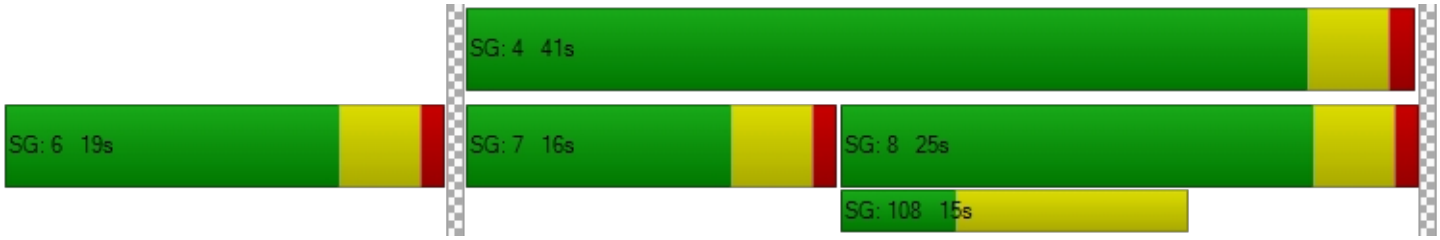
d_M, Delay for Movement [s/veh]	21.71	4.70	17.59	16.27	22.80	22.94
Movement LOS	C	A	B	B	C	C
d_A, Approach Delay [s/veh]	13.97		17.26		22.83	
Approach LOS	B		B		C	
d_I, Intersection Delay [s/veh]	17.33					
Intersection LOS	B					
Intersection V/C	0.730					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.452
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.901	5.122	5.099
Bicycle LOS	E	F	F

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 28: SR 91 EB Ramps & Albertoni Street

Control Type:	Signalized	Delay (sec / veh):	11.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.699

Intersection Setup

Name	SR 91 EB Ramps		Albertoni Street		Albertoni Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	SR 91 EB Ramps		Albertoni Street		Albertoni Street	
Base Volume Input [veh/h]	430	343	227	823	356	63
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	430	343	227	823	356	63
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	108	86	57	206	89	16
Total Analysis Volume [veh/h]	430	343	227	823	356	63
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal group	8	0	1	6	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.5	0.0	3.5	3.5	3.5	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	29	0	11	31	20	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	2.5	2.5	2.5	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	L	C	C	C
C, Cycle Length [s]	37	37	37	37	37	37
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	12	12	5	16	7	7
g / C, Green / Cycle	0.33	0.33	0.12	0.43	0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.24	0.22	0.07	0.23	0.11	0.12
s, saturation flow rate [veh/h]	1781	1589	3459	3560	1870	1776
c, Capacity [veh/h]	582	519	424	1535	350	333
d1, Uniform Delay [s]	11.11	10.74	15.31	7.83	13.82	13.92
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.86	1.44	1.05	0.29	1.63	1.96
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.74	0.66	0.54	0.54	0.60	0.63
d, Delay for Lane Group [s/veh]	12.97	12.18	16.36	8.12	15.46	15.88
Lane Group LOS	B	B	B	A	B	B
Critical Lane Group	Yes	No	No	Yes	No	No
50th-Percentile Queue Length [veh]	2.60	1.98	0.81	1.65	1.45	1.48
50th-Percentile Queue Length [ft]	64.92	49.49	20.21	41.32	36.32	37.10
95th-Percentile Queue Length [veh]	4.67	3.56	1.45	2.98	2.62	2.67
95th-Percentile Queue Length [ft]	116.85	89.08	36.37	74.38	65.38	66.77

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	12.97	12.18	16.36	8.12	15.63	15.88
Movement LOS	B	B	B	A	B	B
d_A, Approach Delay [s/veh]	12.62		9.90		15.67	
Approach LOS	B		A		B	
d_I, Intersection Delay [s/veh]	11.92					
Intersection LOS	B					
Intersection V/C	0.699					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	2.371	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.132	4.999	4.478
Bicycle LOS	D	E	E

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 2: Main Street & I-405 NB Off-Ramp

Control Type:	Signalized	Delay (sec / veh):	11.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.673

Intersection Setup

Name	Main Street			Main Street			I-405 NB Off-Ramp			I-405 NB Off-Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Main Street			Main Street			I-405 NB Off-Ramp			I-405 NB Off-Ramp		
Base Volume Input [veh/h]	28	710	0	0	779	71	0	0	0	107	327	259
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	28	710	0	0	779	71	0	0	0	107	327	259
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	178	0	0	195	18	0	0	0	27	82	65
Total Analysis Volume [veh/h]	28	710	0	0	779	71	0	0	0	107	327	259
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	7	4	0	0	8	0	0	0	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	30	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	10	35	0	0	25	0	0	0	0	0	25	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	0	10	0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.5	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C		C	C
C, Cycle Length [s]	38	38	38	38		38	38
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	1	18	12	12		11	11
g / C, Green / Cycle	0.03	0.47	0.32	0.32		0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.02	0.20	0.23	0.23		0.21	0.21
s, saturation flow rate [veh/h]	1781	3560	1870	1816		1844	1483
c, Capacity [veh/h]	62	1681	596	579		535	431
d1, Uniform Delay [s]	17.94	6.59	11.38	11.48		12.04	12.07
k, delay calibration	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	5.15	0.17	1.60	1.82		1.79	2.29
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.45	0.42	0.71	0.73		0.71	0.72
d, Delay for Lane Group [s/veh]	23.09	6.76	12.98	13.30		13.83	14.36
Lane Group LOS	C	A	B	B		B	B
Critical Lane Group	Yes	No	No	Yes		No	Yes
50th-Percentile Queue Length [veh]	0.29	1.21	2.61	2.66		2.47	2.06
50th-Percentile Queue Length [ft]	7.35	30.37	65.19	66.42		61.64	51.62
95th-Percentile Queue Length [veh]	0.53	2.19	4.69	4.78		4.44	3.72
95th-Percentile Queue Length [ft]	13.23	54.66	117.34	119.55		110.95	92.91

Movement, Approach, & Intersection Results

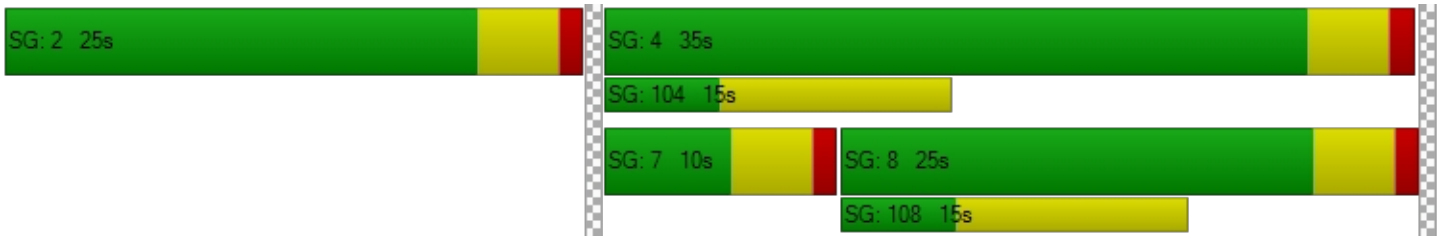
d_M, Delay for Movement [s/veh]	23.09	6.76	0.00	0.00	13.12	13.30	0.00	0.00	0.00	13.83	13.91	14.36
Movement LOS	C	A			B	B				B	B	B
d_A, Approach Delay [s/veh]	7.38			13.14			0.00			14.07		
Approach LOS	A			B			A			B		
d_I, Intersection Delay [s/veh]	11.56											
Intersection LOS	B											
Intersection V/C	0.673											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.903	2.033
Crosswalk LOS	F	F	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1017	683	0	683
d_b, Bicycle Delay [s]	7.25	13.00	30.00	13.00
l_b,int, Bicycle LOS Score for Intersection	2.168	2.261	4.132	2.131
Bicycle LOS	B	B	D	B

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Main Street & I-405 SB On Ramp

Control Type:	Signalized	Delay (sec / veh):	8.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.582

Intersection Setup

Name	Main Street			Main Street			I-405 SB On Ramp			I-405 SB On Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			30.00			30.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No			No			No				
Crosswalk		Yes			No			Yes			Yes	

Volumes

Name	Main Street			Main Street			I-405 SB On Ramp			I-405 SB On Ramp		
Base Volume Input [veh/h]	0	651	69	164	780	0	29	72	21	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	651	69	164	780	0	29	72	21	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	163	17	41	195	0	7	18	5	0	0	0
Total Analysis Volume [veh/h]	0	651	69	164	780	0	29	72	21	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	4	0	3	8	0	0	6	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	5	0	5	5	0	0	5	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	0	30	0	0	0	0
Amber [s]	0.0	3.5	0.0	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	0	20	0	20	40	0	0	20	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	0	0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.5	0.0	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No			No				
Maximum Recall		No		No	No			No				
Pedestrian Recall		No		No	No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	L	C	
C, Cycle Length [s]	29	29	29	29	29	29	
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	
g_i, Effective Green Time [s]	9	9	4	17	3	3	
g / C, Green / Cycle	0.30	0.30	0.13	0.58	0.11	0.11	
(v / s)_i Volume / Saturation Flow Rate	0.19	0.20	0.09	0.22	0.02	0.05	
s, saturation flow rate [veh/h]	1870	1809	1781	3560	1781	1798	
c, Capacity [veh/h]	565	547	228	2079	194	196	
d1, Uniform Delay [s]	8.83	8.91	12.28	3.25	11.83	12.27	
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	1.20	1.36	4.24	0.11	0.35	1.77	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.64	0.66	0.72	0.38	0.15	0.47	
d, Delay for Lane Group [s/veh]	10.03	10.26	16.51	3.36	12.18	14.04	
Lane Group LOS	B	B	B	A	B	B	
Critical Lane Group	No	Yes	Yes	No	No	Yes	
50th-Percentile Queue Length [veh]	1.43	1.46	1.03	0.28	0.15	0.52	
50th-Percentile Queue Length [ft]	35.69	36.40	25.64	7.02	3.68	13.07	
95th-Percentile Queue Length [veh]	2.57	2.62	1.85	0.51	0.26	0.94	
95th-Percentile Queue Length [ft]	64.24	65.52	46.16	12.64	6.62	23.52	

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	10.14	10.26	16.51	3.36	0.00	12.18	14.04	14.04	0.00	0.00	0.00
Movement LOS		B	B	B	A		B	B	B			
d_A, Approach Delay [s/veh]	10.15			5.65			13.59			0.00		
Approach LOS	B			A			B			A		
d_I, Intersection Delay [s/veh]	8.00											
Intersection LOS	A											
Intersection V/C	0.582											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.482	0.000	1.755	1.701
Crosswalk LOS	B	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	517	1183	517	0
d_b, Bicycle Delay [s]	16.50	5.00	16.50	30.00
l_b,int, Bicycle LOS Score for Intersection	2.154	2.338	1.761	4.132
Bicycle LOS	B	B	A	D

Sequence

Ring 1	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Avalon Boulevard & SR-91 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	9.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.546

Intersection Setup

Name	Avalon Boulevard		Avalon Boulevard		SR-91 WB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name	Avalon Boulevard		Avalon Boulevard		SR-91 WB Ramps	
Base Volume Input [veh/h]	974	173	179	1160	392	606
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	974	173	179	1160	392	606
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	244	43	45	290	98	152
Total Analysis Volume [veh/h]	974	173	179	1160	392	606
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	4	0	0	8	2	0
Auxiliary Signal Groups						
Lead / Lag	-	-	-	-	Lead	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.5	0.0	0.0	3.5	3.5	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	31	0	0	31	29	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	2.5	2.5	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	C	R
C, Cycle Length [s]	40	40	40	40	40	40	40
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	19	19	19	19	12	12	12
g / C, Green / Cycle	0.47	0.47	0.47	0.47	0.30	0.30	0.30
(v / s)_i Volume / Saturation Flow Rate	0.19	0.11	0.16	0.23	0.19	0.21	0.21
s, saturation flow rate [veh/h]	5094	1589	1121	5094	1781	1621	1589
c, Capacity [veh/h]	2403	750	514	2403	542	493	484
d1, Uniform Delay [s]	6.94	6.30	11.77	7.27	11.97	12.24	12.31
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.11	0.16	0.40	0.15	1.13	1.61	1.75
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.41	0.23	0.35	0.48	0.61	0.67	0.69
d, Delay for Lane Group [s/veh]	7.05	6.45	12.17	7.42	13.10	13.86	14.05
Lane Group LOS	A	A	B	A	B	B	B
Critical Lane Group	No	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh]	1.23	0.62	0.55	1.54	2.17	2.27	2.29
50th-Percentile Queue Length [ft]	30.76	15.39	13.86	38.44	54.33	56.77	57.36
95th-Percentile Queue Length [veh]	2.21	1.11	1.00	2.77	3.91	4.09	4.13
95th-Percentile Queue Length [ft]	55.37	27.70	24.95	69.19	97.80	102.18	103.25

Movement, Approach, & Intersection Results

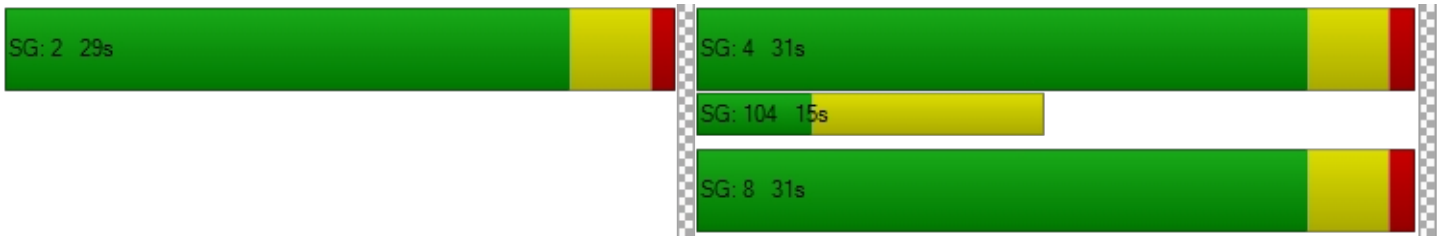
d_M, Delay for Movement [s/veh]	7.05	6.45	12.17	7.42	13.21	13.96
Movement LOS	A	A	B	A	B	B
d_A, Approach Delay [s/veh]	6.96		8.05		13.67	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	9.30					
Intersection LOS	A					
Intersection V/C	0.546					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.798
Crosswalk LOS	F	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.763	4.869	5.779
Bicycle LOS	E	E	F

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Avalon Boulevard & I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	8.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.576

Intersection Setup

Name	Avalon Boulevard			Avalon Boulevard			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			30.00			30.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No			No						No	
Crosswalk		No			No			Yes			Yes	

Volumes

Name	Avalon Boulevard			Avalon Boulevard			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	475	1221	0	0	865	291	0	0	0	106	0	509
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	475	1221	0	0	865	291	0	0	0	106	0	509
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	119	305	0	0	216	73	0	0	0	27	0	127
Total Analysis Volume [veh/h]	475	1221	0	0	865	291	0	0	0	106	0	509
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss	Permiss	Permiss	Unsigna
Signal group	7	4	0	0	8	0	0	0	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	30	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	14	34	0	0	20	0	0	0	0	0	26	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	0	10	0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.5	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C		L	C
C, Cycle Length [s]	34	34	34		34	34
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	8	22	10		3	3
g / C, Green / Cycle	0.22	0.64	0.29		0.09	0.09
(v / s)_i Volume / Saturation Flow Rate	0.14	0.34	0.17		0.03	0.03
s, saturation flow rate [veh/h]	3459	3560	5094		1781	1781
c, Capacity [veh/h]	771	2286	1462		168	168
d1, Uniform Delay [s]	11.93	3.33	10.44		14.42	14.42
k, delay calibration	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	0.81	0.19	0.38		1.07	1.07
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.62	0.53	0.59		0.32	0.32
d, Delay for Lane Group [s/veh]	12.74	3.52	10.82		15.49	15.49
Lane Group LOS	B	A	B		B	B
Critical Lane Group	No	Yes	No		No	Yes
50th-Percentile Queue Length [veh]	1.31	0.53	1.39		0.36	0.36
50th-Percentile Queue Length [ft]	32.84	13.19	34.75		8.99	8.99
95th-Percentile Queue Length [veh]	2.36	0.95	2.50		0.65	0.65
95th-Percentile Queue Length [ft]	59.12	23.75	62.54		16.19	16.19

Movement, Approach, & Intersection Results

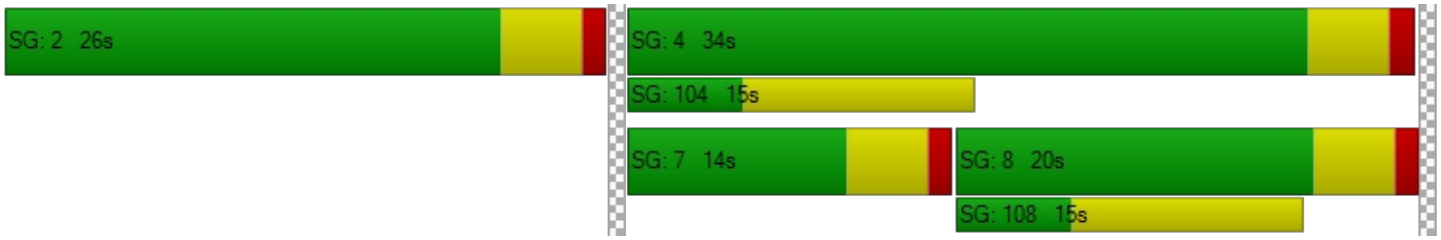
d_M, Delay for Movement [s/veh]	12.74	3.52	0.00	0.00	10.82	0.00	0.00	0.00	0.00	15.49	15.49	0.00
Movement LOS	B	A			B					B	B	
d_A, Approach Delay [s/veh]	6.10			10.82			0.00			15.49		
Approach LOS	A			B			A			B		
d_I, Intersection Delay [s/veh]	8.01											
Intersection LOS	A											
Intersection V/C	0.576											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.927	1.955
Crosswalk LOS	F	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	983	517	0	717
d_b, Bicycle Delay [s]	7.75	16.50	30.00	12.35
l_b,int, Bicycle LOS Score for Intersection	2.959	2.035	4.132	1.735
Bicycle LOS	C	B	D	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 16: Avalon Boulevard & I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	9.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.805

Intersection Setup

Name	Avalon Boulevard			Avalon Boulevard			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Avalon Boulevard			Avalon Boulevard			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	26	1115	140	0	616	358	507	32	594	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	26	1115	140	0	616	358	507	32	594	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	279	35	0	154	90	127	8	149	0	0	0
Total Analysis Volume [veh/h]	26	1115	140	0	616	358	507	32	594	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss
Signal group	7	4	0	0	8	0	0	6	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	5	0	0	0	0
Maximum Green [s]	30	30	0	0	30	0	0	30	0	0	0	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	10	30	0	0	20	0	0	30	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	0	0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Minimum Recall	No	No			No			No				
Maximum Recall	No	No			No			No				
Pedestrian Recall	No	No			No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	C	
C, Cycle Length [s]	31	31	31	31	31	31	
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	
g_i, Effective Green Time [s]	1	14	14	9	8	8	
g / C, Green / Cycle	0.03	0.46	0.46	0.28	0.25	0.25	
(v / s)_i Volume / Saturation Flow Rate	0.01	0.34	0.34	0.17	0.15	0.01	
s, saturation flow rate [veh/h]	1781	1870	1798	3560	3459	3560	
c, Capacity [veh/h]	59	863	829	1002	850	875	
d1, Uniform Delay [s]	14.57	6.77	6.79	9.59	10.24	8.82	
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	5.01	1.27	1.34	0.62	0.67	0.02	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.44	0.74	0.74	0.61	0.60	0.04	
d, Delay for Lane Group [s/veh]	19.59	8.04	8.13	10.21	10.91	8.84	
Lane Group LOS	B	A	A	B	B	A	
Critical Lane Group	No	No	Yes	No	Yes	No	
50th-Percentile Queue Length [veh]	0.22	1.96	1.91	1.29	1.13	0.06	
50th-Percentile Queue Length [ft]	5.59	48.89	47.64	32.24	28.22	1.48	
95th-Percentile Queue Length [veh]	0.40	3.52	3.43	2.32	2.03	0.11	
95th-Percentile Queue Length [ft]	10.06	88.00	85.75	58.04	50.79	2.66	

Movement, Approach, & Intersection Results

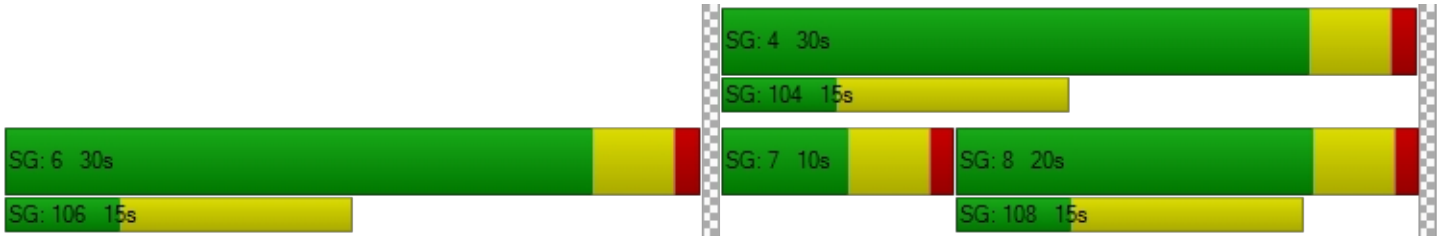
d_M, Delay for Movement [s/veh]	19.59	8.08	8.13	0.00	10.21	0.00	10.91	8.84	0.00	0.00	0.00	0.00
Movement LOS	B	A	A		B		B	A				
d_A, Approach Delay [s/veh]	8.32			10.21			10.79			0.00		
Approach LOS	A			B			B			A		
d_I, Intersection Delay [s/veh]	9.34											
Intersection LOS	A											
Intersection V/C	0.805											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.650	0.000	2.525	1.779
Crosswalk LOS	B	F	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	850	517	850	0
d_b, Bicycle Delay [s]	9.92	16.50	9.92	30.00
l_b,int, Bicycle LOS Score for Intersection	2.616	2.068	2.004	4.132
Bicycle LOS	B	B	B	D

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 17: Main Street & SR 91 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	14.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.701

Intersection Setup

Name	Main Street			Main Street			SR-91 WB Ramps			SR-91 WB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			No			Yes		

Volumes

Name	Main Street			Main Street			SR-91 WB Ramps			SR-91 WB Ramps		
Base Volume Input [veh/h]	0	572	121	66	536	0	0	0	0	486	0	409
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	572	121	66	536	0	0	0	0	486	0	409
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	143	30	17	134	0	0	0	0	122	0	102
Total Analysis Volume [veh/h]	0	572	121	66	536	0	0	0	0	486	0	409
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	7	4	0	3	8	0	0	0	0	2	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	30	30	0	0	0	0	30	0	0
Amber [s]	3.5	3.5	0.0	3.5	3.5	0.0	0.0	0.0	0.0	3.5	0.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	10	22	0	10	22	0	0	0	0	28	0	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	5	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	10	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	2.5	2.5	0.0	0.0	0.0	0.0	2.5	0.0	0.0
Minimum Recall	No	No		No	No					No		
Maximum Recall	No	No		No	No					No		
Pedestrian Recall	No	No		No	No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C		L	R
C, Cycle Length [s]	42	42	42	42	42		42	42
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	0	11	11	3	14		15	15
g / C, Green / Cycle	0.00	0.26	0.26	0.06	0.33		0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.00	0.19	0.19	0.04	0.15		0.27	0.26
s, saturation flow rate [veh/h]	1781	1870	1758	1781	3560		1781	1589
c, Capacity [veh/h]	0	493	464	116	1170		627	560
d1, Uniform Delay [s]	0.00	14.16	14.17	19.20	11.22		12.21	11.95
k, delay calibration	0.11	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	0.00	2.02	2.18	4.38	0.28		2.10	1.86
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.72	0.73	0.57	0.46		0.78	0.73
d, Delay for Lane Group [s/veh]	0.00	16.17	16.35	23.58	11.50		14.30	13.81
Lane Group LOS	A	B	B	C	B		B	B
Critical Lane Group	No	No	Yes	Yes	No		Yes	No
50th-Percentile Queue Length [veh]	0.00	2.80	2.67	0.69	1.61		3.51	2.88
50th-Percentile Queue Length [ft]	0.00	69.95	66.67	17.31	40.37		87.64	71.91
95th-Percentile Queue Length [veh]	0.00	5.04	4.80	1.25	2.91		6.31	5.18
95th-Percentile Queue Length [ft]	0.00	125.91	120.01	31.16	72.67		157.75	129.45

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	16.24	16.35	23.58	11.50	0.00	0.00	0.00	0.00	14.30	0.00	13.81
Movement LOS	A	B	B	C	B					B		B
d_A, Approach Delay [s/veh]	16.26			12.83			0.00			14.08		
Approach LOS	B			B			A			B		
d_I, Intersection Delay [s/veh]	14.42											
Intersection LOS	B											
Intersection V/C	0.701											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.273
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	583	583	0	0
d_b, Bicycle Delay [s]	15.05	15.05	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	2.131	2.056	4.132	4.132
Bicycle LOS	B	B	D	D

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 21: I-110 NB On-Ramp & 190th Street

Control Type:	Signalized	Delay (sec / veh):	6.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.487

Intersection Setup

Name	I-110 NB On Ramp			I-110 NB On Ramp			190th Street			190th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	No			Yes			No			No		

Volumes

Name	I-110 NB On Ramp			I-110 NB On Ramp			190th Street			190th Street		
Base Volume Input [veh/h]	0	0	0	0	0	0	164	929	0	0	600	241
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	164	929	0	0	600	241
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	41	232	0	0	150	60
Total Analysis Volume [veh/h]	0	0	0	0	0	0	164	929	0	0	600	241
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	0	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	0	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	30	30	0
Amber [s]	0.0	3.5	0.0	0.0	0.0	0.0	3.5	3.5	0.0	3.5	3.5	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	14	0	0	0	0	20	36	0	10	26	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.5	0.0	0.0	0.0	0.0	2.5	2.5	0.0	2.5	2.5	0.0
Minimum Recall		No					No	No		No	No	
Maximum Recall		No					No	No		No	No	
Pedestrian Recall		No					No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C		L	C	C	L	C	R
C, Cycle Length [s]	24		24	24	24	24	24	24
L, Total Lost Time per Cycle [s]	4.50		4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50		2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	0		3	11	11	0	8	8
g / C, Green / Cycle	0.00		0.14	0.45	0.45	0.00	0.31	0.31
(v / s)_i Volume / Saturation Flow Rate	0.00		0.05	0.25	0.25	0.00	0.17	0.15
s, saturation flow rate [veh/h]	1870		3459	1870	1870	1781	3560	1589
c, Capacity [veh/h]	1		483	840	840	1	1105	493
d1, Uniform Delay [s]	0.00		9.55	4.96	4.96	0.00	7.03	6.89
k, delay calibration	0.11		0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00		0.41	0.57	0.57	0.00	0.42	0.75
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00		0.34	0.55	0.55	0.00	0.54	0.49
d, Delay for Lane Group [s/veh]	0.00		9.96	5.53	5.53	0.00	7.45	7.64
Lane Group LOS	A		A	A	A	A	A	A
Critical Lane Group	No		No	Yes	No	No	No	No
50th-Percentile Queue Length [veh]	0.00		0.28	0.67	0.67	0.00	0.72	0.62
50th-Percentile Queue Length [ft]	0.00		7.09	16.77	16.77	0.00	17.94	15.44
95th-Percentile Queue Length [veh]	0.00		0.51	1.21	1.21	0.00	1.29	1.11
95th-Percentile Queue Length [ft]	0.00		12.76	30.19	30.19	0.00	32.30	27.79

Movement, Approach, & Intersection Results

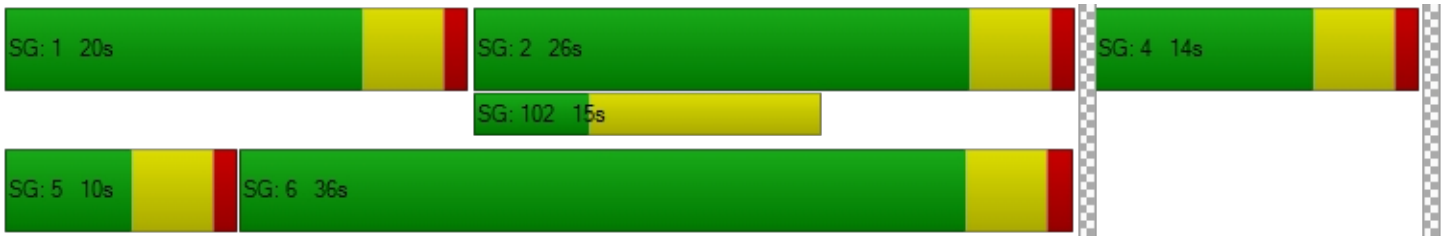
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00	9.96	5.53	5.53	0.00	7.45	7.64
Movement LOS	A	A	A				A	A	A	A	A	A
d_A, Approach Delay [s/veh]	0.00			0.00			6.19			7.50		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	6.76											
Intersection LOS	A											
Intersection V/C	0.487											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	21.68	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	1.893	0.000	0.000
Crosswalk LOS	F	A	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	317	0	1050	717
d_b, Bicycle Delay [s]	21.25	30.00	6.77	12.35
l_b,int, Bicycle LOS Score for Intersection	1.560	4.132	2.461	2.253
Bicycle LOS	A	D	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 22: I-110 SB Off-Ramp & 190th Street

Control Type:	Signalized	Delay (sec / veh):	15.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.830

Intersection Setup

Name	I-110 SB Off-Ramp		190th Street		190th Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	I-110 SB Off-Ramp		190th Street		190th Street	
Base Volume Input [veh/h]	283	747	0	772	625	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	283	747	0	772	625	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	71	187	0	193	156	0
Total Analysis Volume [veh/h]	283	747	0	772	625	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	8	0	0	6	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.5	0.0	0.0	3.5	3.5	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	39	0	0	21	21	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	2.5	2.5	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	46	46	46	46
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	24	24	13	13
g / C, Green / Cycle	0.52	0.52	0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.16	0.47	0.22	0.12
s, saturation flow rate [veh/h]	1781	1589	3560	5094
c, Capacity [veh/h]	929	829	1015	1452
d1, Uniform Delay [s]	6.33	10.05	15.18	13.55
k, delay calibration	0.11	0.24	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.18	8.15	1.21	0.20
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.30	0.90	0.76	0.43
d, Delay for Lane Group [s/veh]	6.51	18.19	16.39	13.75
Lane Group LOS	A	B	B	B
Critical Lane Group	No	Yes	Yes	No
50th-Percentile Queue Length [veh]	1.15	6.51	3.29	1.53
50th-Percentile Queue Length [ft]	28.82	162.66	82.27	38.27
95th-Percentile Queue Length [veh]	2.08	10.69	5.92	2.76
95th-Percentile Queue Length [ft]	51.88	267.24	148.09	68.89

Movement, Approach, & Intersection Results

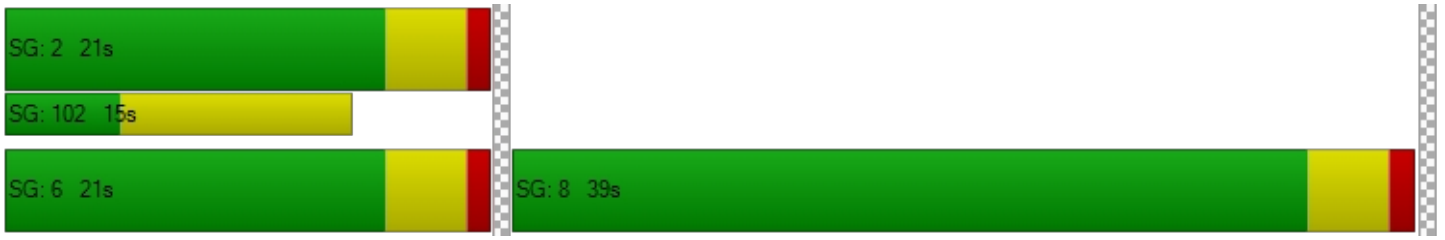
d_M, Delay for Movement [s/veh]	6.51	18.19	0.00	16.39	13.75	0.00
Movement LOS	A	B		B	B	
d_A, Approach Delay [s/veh]	14.99		16.39		13.75	
Approach LOS	B		B		B	
d_I, Intersection Delay [s/veh]	15.11					
Intersection LOS	B					
Intersection V/C	0.830					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	2.198	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.132	4.769	4.476
Bicycle LOS	D	E	E

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	All-way stop	Delay (sec / veh):	60.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.106

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	80	111	375	96	781	327
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	80	111	375	96	781	327
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	28	94	24	195	82
Total Analysis Volume [veh/h]	80	111	375	96	781	327
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	457	502	455	485	554	556
Degree of Utilization, x	0.18	0.22	0.82	0.20	1.11	1.00

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.63	0.84	7.88	0.73	18.09	14.29
95th-Percentile Queue Length [ft]	15.71	20.98	197.01	18.23	452.33	357.34
Approach Delay [s/veh]	12.05		32.86		80.12	
Approach LOS	B		D		F	
Intersection Delay [s/veh]	60.20					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 27: Figueroa Street & I-110 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	17.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.734

Intersection Setup

Name	Figueroa Street		Figueroa Street		I-110 NB Ramps	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name	Figueroa Street		Figueroa Street		I-110 NB Ramps	
Base Volume Input [veh/h]	692	605	415	194	612	225
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	692	605	415	194	612	225
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	173	151	104	49	153	56
Total Analysis Volume [veh/h]	692	605	415	194	612	225
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	7	4	8	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	5	5	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.5	3.5	3.5	0.0	3.5	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	18	38	20	0	22	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	10	10	0	10	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	2.5	0.0	2.5	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	C
C, Cycle Length [s]	53	53	53	53	53	53
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	14	28	10	10	16	16
g / C, Green / Cycle	0.26	0.53	0.18	0.18	0.31	0.31
(v / s)_i Volume / Saturation Flow Rate	0.20	0.17	0.12	0.12	0.24	0.25
s, saturation flow rate [veh/h]	3459	3560	3560	1589	1781	1671
c, Capacity [veh/h]	907	1872	638	285	545	511
d1, Uniform Delay [s]	18.19	7.25	20.40	20.52	16.92	17.09
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.36	0.10	1.13	2.86	2.47	3.04
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.76	0.32	0.65	0.68	0.78	0.81
d, Delay for Lane Group [s/veh]	19.55	7.35	21.52	23.38	19.39	20.13
Lane Group LOS	B	A	C	C	B	C
Critical Lane Group	Yes	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh]	3.65	1.54	2.28	2.28	4.51	4.48
50th-Percentile Queue Length [ft]	91.31	38.41	56.97	56.91	112.67	111.89
95th-Percentile Queue Length [veh]	6.57	2.77	4.10	4.10	7.99	7.95
95th-Percentile Queue Length [ft]	164.35	69.14	102.55	102.43	199.71	198.63

Movement, Approach, & Intersection Results

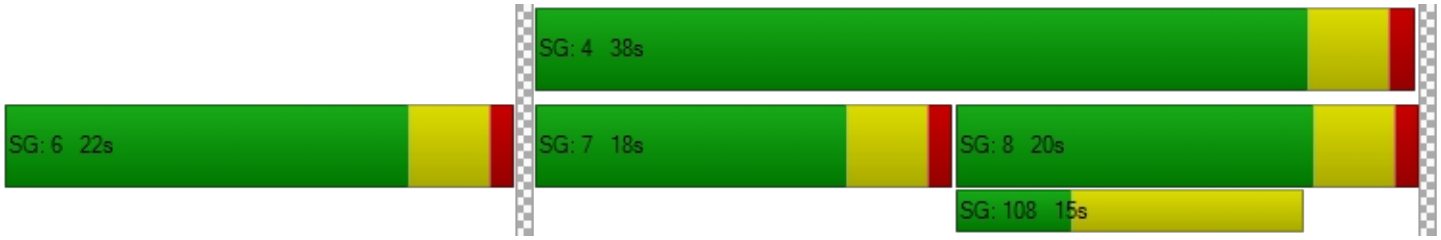
d_M, Delay for Movement [s/veh]	19.55	7.35	21.52	23.38	19.62	20.13
Movement LOS	B	A	C	C	B	C
d_A, Approach Delay [s/veh]	13.86		22.11		19.75	
Approach LOS	B		C		B	
d_I, Intersection Delay [s/veh]	17.49					
Intersection LOS	B					
Intersection V/C	0.734					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.532
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
I_b,int, Bicycle LOS Score for Intersection	5.202	4.635	5.513
Bicycle LOS	F	E	F

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 28: SR 91 EB Ramps & Albertoni Street

Control Type:	Signalized	Delay (sec / veh):	12.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.618

Intersection Setup

Name	SR 91 EB Ramps		Albertoni Street		Albertoni Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	SR 91 EB Ramps		Albertoni Street		Albertoni Street	
Base Volume Input [veh/h]	281	269	284	331	500	89
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	281	269	284	331	500	89
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	70	67	71	83	125	22
Total Analysis Volume [veh/h]	281	269	284	331	500	89
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal group	8	0	1	6	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.5	0.0	3.5	3.5	3.5	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	23	0	14	37	23	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	2.5	2.5	2.5	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	L	C	C	C
C, Cycle Length [s]	37	37	37	37	37	37
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	9	9	5	19	9	9
g / C, Green / Cycle	0.25	0.25	0.15	0.51	0.24	0.24
(v / s)_i Volume / Saturation Flow Rate	0.16	0.17	0.08	0.09	0.16	0.17
s, saturation flow rate [veh/h]	1781	1589	3459	3560	1870	1775
c, Capacity [veh/h]	440	393	503	1816	455	432
d1, Uniform Delay [s]	12.48	12.65	14.76	4.91	12.61	12.73
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.54	2.11	1.00	0.05	1.55	1.90
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.64	0.68	0.56	0.18	0.65	0.68
d, Delay for Lane Group [s/veh]	14.02	14.77	15.75	4.96	14.16	14.63
Lane Group LOS	B	B	B	A	B	B
Critical Lane Group	No	Yes	Yes	No	No	Yes
50th-Percentile Queue Length [veh]	1.81	1.80	0.98	0.40	1.90	1.95
50th-Percentile Queue Length [ft]	45.15	45.01	24.53	10.10	47.62	48.85
95th-Percentile Queue Length [veh]	3.25	3.24	1.77	0.73	3.43	3.52
95th-Percentile Queue Length [ft]	81.27	81.02	44.15	18.18	85.71	87.93

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	14.02	14.77	15.75	4.96	14.35	14.63
Movement LOS	B	B	B	A	B	B
d_A, Approach Delay [s/veh]	14.39		9.94		14.40	
Approach LOS	B		A		B	
d_I, Intersection Delay [s/veh]	12.83					
Intersection LOS	B					
Intersection V/C	0.618					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	2.337	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.132	4.640	4.618
Bicycle LOS	D	E	E

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 2: Main Street & I-405 NB Off-Ramp

Control Type:	Signalized	Delay (sec / veh):	14.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.789

Intersection Setup

Name	Main Street			Main Street			I-405 NB Off-Ramp			I-405 NB Off-Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Main Street			Main Street			I-405 NB Off-Ramp			I-405 NB Off-Ramp		
Base Volume Input [veh/h]	21	742	0	0	1361	93	0	0	0	102	122	279
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	21	742	0	0	1361	93	0	0	0	102	122	279
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	186	0	0	340	23	0	0	0	26	31	70
Total Analysis Volume [veh/h]	21	742	0	0	1361	93	0	0	0	102	122	279
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	7	4	0	0	8	0	0	0	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	30	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	10	42	0	0	32	0	0	0	0	0	18	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	0	10	0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.5	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C		C	C
C, Cycle Length [s]	51	51	51	51		51	51
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	1	29	23	23		12	12
g / C, Green / Cycle	0.03	0.58	0.46	0.46		0.25	0.25
(v / s)_i Volume / Saturation Flow Rate	0.01	0.21	0.39	0.40		0.12	0.19
s, saturation flow rate [veh/h]	1781	3560	1870	1829		1828	1446
c, Capacity [veh/h]	46	2054	865	846		450	356
d1, Uniform Delay [s]	24.40	5.74	12.00	12.17		16.46	17.89
k, delay calibration	0.11	0.11	0.19	0.20		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	7.06	0.11	3.99	4.90		0.86	3.83
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.46	0.36	0.84	0.86		0.50	0.78
d, Delay for Lane Group [s/veh]	31.46	5.85	15.99	17.07		17.31	21.72
Lane Group LOS	C	A	B	B		B	C
Critical Lane Group	Yes	No	No	Yes		No	Yes
50th-Percentile Queue Length [veh]	0.32	1.47	6.52	6.80		2.08	3.05
50th-Percentile Queue Length [ft]	7.99	36.72	163.07	169.90		51.98	76.22
95th-Percentile Queue Length [veh]	0.58	2.64	10.71	11.07		3.74	5.49
95th-Percentile Queue Length [ft]	14.38	66.10	267.78	276.78		93.56	137.20

Movement, Approach, & Intersection Results

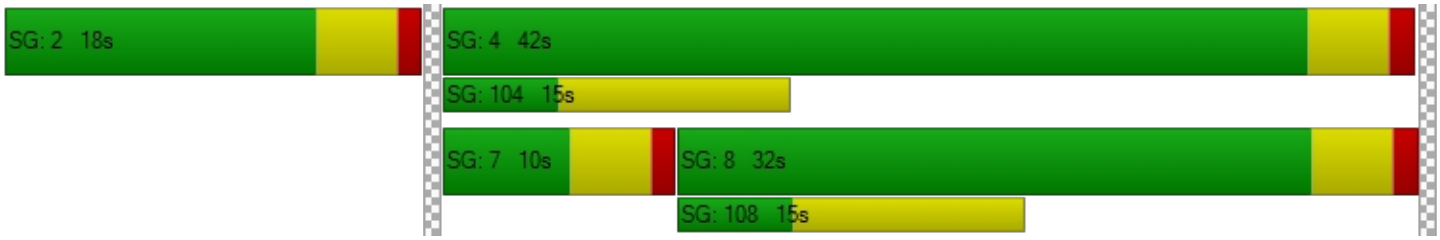
d_M, Delay for Movement [s/veh]	31.46	5.85	0.00	0.00	16.49	17.07	0.00	0.00	0.00	17.31	17.31	21.72
Movement LOS	C	A			B	B				B	B	C
d_A, Approach Delay [s/veh]	6.55			16.53			0.00			19.76		
Approach LOS	A			B			A			B		
d_I, Intersection Delay [s/veh]	14.33											
Intersection LOS	B											
Intersection V/C	0.789											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.811	1.941
Crosswalk LOS	F	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1250	917	0	450
d_b, Bicycle Delay [s]	4.22	8.80	30.00	18.02
l_b,int, Bicycle LOS Score for Intersection	2.189	2.759	4.132	1.975
Bicycle LOS	B	C	D	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Main Street & I-405 SB On Ramp

Control Type:	Signalized	Delay (sec / veh):	14.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.774

Intersection Setup

Name	Main Street			Main Street			I-405 SB On Ramp			I-405 SB On Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Main Street			Main Street			I-405 SB On Ramp			I-405 SB On Ramp		
Base Volume Input [veh/h]	0	706	150	318	1145	0	62	279	42	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	706	150	318	1145	0	62	279	42	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	177	38	80	286	0	16	70	11	0	0	0
Total Analysis Volume [veh/h]	0	706	150	318	1145	0	62	279	42	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	4	0	3	8	0	0	6	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	5	0	5	5	0	0	5	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	0	30	0	0	0	0
Amber [s]	0.0	3.5	0.0	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	0	20	0	20	40	0	0	20	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	0	0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.5	0.0	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No			No				
Maximum Recall		No		No	No			No				
Pedestrian Recall		No		No	No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	L	C	
C, Cycle Length [s]	52	52	52	52	52	52	
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	
g_i, Effective Green Time [s]	16	16	12	32	12	12	
g / C, Green / Cycle	0.30	0.30	0.22	0.61	0.22	0.22	
(v / s)_i Volume / Saturation Flow Rate	0.23	0.24	0.18	0.32	0.03	0.18	
s, saturation flow rate [veh/h]	1870	1761	1781	3560	1781	1828	
c, Capacity [veh/h]	565	532	392	2166	393	403	
d1, Uniform Delay [s]	16.59	16.90	19.45	5.95	16.55	19.37	
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	2.10	2.90	4.05	0.20	0.19	3.62	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.76	0.80	0.81	0.53	0.16	0.80	
d, Delay for Lane Group [s/veh]	18.70	19.80	23.50	6.15	16.73	23.00	
Lane Group LOS	B	B	C	A	B	C	
Critical Lane Group	No	Yes	Yes	No	No	Yes	
50th-Percentile Queue Length [veh]	4.37	4.55	3.72	2.45	0.56	3.71	
50th-Percentile Queue Length [ft]	109.33	113.69	93.09	61.16	14.12	92.65	
95th-Percentile Queue Length [veh]	7.80	8.04	6.70	4.40	1.02	6.67	
95th-Percentile Queue Length [ft]	195.08	201.12	167.56	110.09	25.41	166.78	

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	19.13	19.80	23.50	6.15	0.00	16.73	23.00	23.00	0.00	0.00	0.00
Movement LOS		B	B	C	A		B	C	C			
d_A, Approach Delay [s/veh]	19.25			9.92			21.98			0.00		
Approach LOS	B			A			C			A		
d_I, Intersection Delay [s/veh]	14.59											
Intersection LOS	B											
Intersection V/C	0.774											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.610	0.000	1.882	2.132
Crosswalk LOS	B	F	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	517	1183	517	0
d_b, Bicycle Delay [s]	16.50	5.00	16.50	30.00
l_b,int, Bicycle LOS Score for Intersection	2.266	2.767	2.192	4.132
Bicycle LOS	B	C	B	D

Sequence

Ring 1	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Avalon Boulevard & SR-91 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	8.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.530

Intersection Setup

Name	Avalon Boulevard		Avalon Boulevard		SR-91 WB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name	Avalon Boulevard		Avalon Boulevard		SR-91 WB Ramps	
Base Volume Input [veh/h]	1272	245	165	1175	425	453
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1272	245	165	1175	425	453
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	318	61	41	294	106	113
Total Analysis Volume [veh/h]	1272	245	165	1175	425	453
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	4	0	0	8	2	0
Auxiliary Signal Groups						
Lead / Lag	-	-	-	-	Lead	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.5	0.0	0.0	3.5	3.5	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	28	0	0	28	32	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	2.5	2.5	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	C	R
C, Cycle Length [s]	42	42	42	42	42	42	42
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	22	22	22	22	11	11	11
g / C, Green / Cycle	0.52	0.52	0.52	0.52	0.27	0.27	0.27
(v / s)_i Volume / Saturation Flow Rate	0.25	0.15	0.20	0.23	0.17	0.18	0.18
s, saturation flow rate [veh/h]	5094	1589	845	5094	1781	1667	1589
c, Capacity [veh/h]	2655	828	440	2655	476	446	425
d1, Uniform Delay [s]	6.50	5.77	12.22	6.34	13.73	13.85	13.93
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.13	0.20	0.53	0.12	1.37	1.64	1.87
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.48	0.30	0.38	0.44	0.63	0.66	0.67
d, Delay for Lane Group [s/veh]	6.64	5.97	12.75	6.46	15.10	15.49	15.81
Lane Group LOS	A	A	B	A	B	B	B
Critical Lane Group	Yes	No	No	No	No	No	Yes
50th-Percentile Queue Length [veh]	1.59	0.84	0.56	1.43	2.26	2.25	2.24
50th-Percentile Queue Length [ft]	39.68	21.05	13.94	35.72	56.41	56.14	55.98
95th-Percentile Queue Length [veh]	2.86	1.52	1.00	2.57	4.06	4.04	4.03
95th-Percentile Queue Length [ft]	71.42	37.88	25.10	64.29	101.54	101.05	100.77

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	6.64	5.97	12.75	6.46	15.22	15.69
Movement LOS	A	A	B	A	B	B
d_A, Approach Delay [s/veh]	6.53		7.23		15.46	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	8.88					
Intersection LOS	A					
Intersection V/C	0.530					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.766
Crosswalk LOS	F	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.967	4.869	5.581
Bicycle LOS	E	E	F

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 15: Avalon Boulevard & I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	9.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.617

Intersection Setup

Name	Avalon Boulevard			Avalon Boulevard			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			30.00			30.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No			No						No	
Crosswalk		No			No			Yes			Yes	

Volumes

Name	Avalon Boulevard			Avalon Boulevard			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	348	1210	0	0	1529	539	0	0	0	186	2	517
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	348	1210	0	0	1529	539	0	0	0	186	2	517
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	87	303	0	0	382	135	0	0	0	47	1	129
Total Analysis Volume [veh/h]	348	1210	0	0	1529	539	0	0	0	186	2	517
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss	Permiss	Permiss	Unsigna
Signal group	7	4	0	0	8	0	0	0	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	30	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	15	50	0	0	35	0	0	0	0	0	10	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	0	10	0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.5	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C		L	C
C, Cycle Length [s]	45	45	45		45	45
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	7	32	20		5	5
g / C, Green / Cycle	0.16	0.70	0.44		0.10	0.10
(v / s)_i Volume / Saturation Flow Rate	0.10	0.34	0.30		0.05	0.05
s, saturation flow rate [veh/h]	3459	3560	5094		1781	1783
c, Capacity [veh/h]	549	2499	2262		178	179
d1, Uniform Delay [s]	17.88	3.06	10.04		19.43	19.43
k, delay calibration	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	1.21	0.15	0.36		2.40	2.39
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.63	0.48	0.68		0.53	0.53
d, Delay for Lane Group [s/veh]	19.10	3.21	10.40		21.83	21.82
Lane Group LOS	B	A	B		C	C
Critical Lane Group	Yes	No	Yes		Yes	No
50th-Percentile Queue Length [veh]	1.59	0.86	3.08		0.96	0.96
50th-Percentile Queue Length [ft]	39.66	21.39	77.01		23.95	23.96
95th-Percentile Queue Length [veh]	2.86	1.54	5.54		1.72	1.73
95th-Percentile Queue Length [ft]	71.39	38.50	138.62		43.11	43.13

Movement, Approach, & Intersection Results

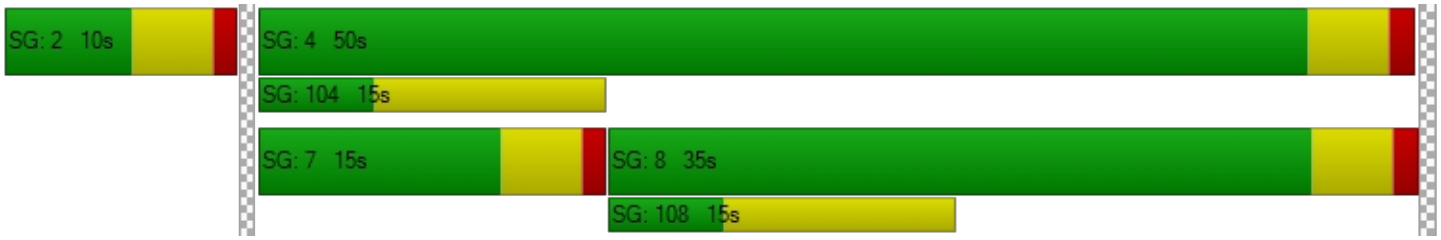
d_M, Delay for Movement [s/veh]	19.10	3.21	0.00	0.00	10.40	0.00	0.00	0.00	0.00	21.83	21.82	0.00
Movement LOS	B	A			B					C	C	
d_A, Approach Delay [s/veh]	6.76			10.40			0.00			21.83		
Approach LOS	A			B			A			C		
d_I, Intersection Delay [s/veh]	9.32											
Intersection LOS	A											
Intersection V/C	0.617											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.866	1.982
Crosswalk LOS	F	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1517	1017	0	183
d_b, Bicycle Delay [s]	1.75	7.25	30.00	24.75
l_b,int, Bicycle LOS Score for Intersection	2.845	2.401	4.132	1.870
Bicycle LOS	C	B	D	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 16: Avalon Boulevard & I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	9.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.674

Intersection Setup

Name	Avalon Boulevard			Avalon Boulevard			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			30.00			30.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No			No			No				
Crosswalk		Yes			No			Yes			Yes	

Volumes

Name	Avalon Boulevard			Avalon Boulevard			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	53	1172	186	0	1183	537	350	226	457	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	53	1172	186	0	1183	537	350	226	457	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	293	47	0	296	134	88	57	114	0	0	0
Total Analysis Volume [veh/h]	53	1172	186	0	1183	537	350	226	457	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss
Signal group	7	4	0	0	8	0	0	6	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	5	0	0	0	0
Maximum Green [s]	30	30	0	0	30	0	0	30	0	0	0	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	10	40	0	0	30	0	0	20	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	0	0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Minimum Recall	No	No			No			No				
Maximum Recall	No	No			No			No				
Pedestrian Recall	No	No			No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	C	
C, Cycle Length [s]	41	41	41	41	41	41	
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	
g_i, Effective Green Time [s]	2	24	24	18	7	7	
g / C, Green / Cycle	0.06	0.60	0.60	0.43	0.18	0.18	
(v / s)_i Volume / Saturation Flow Rate	0.03	0.37	0.37	0.33	0.10	0.06	
s, saturation flow rate [veh/h]	1781	1870	1782	3560	3459	3560	
c, Capacity [veh/h]	100	1123	1071	1546	618	636	
d1, Uniform Delay [s]	18.73	5.16	5.19	9.78	15.32	14.70	
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	4.27	0.55	0.60	0.81	0.82	0.34	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.53	0.62	0.62	0.77	0.57	0.36	
d, Delay for Lane Group [s/veh]	23.00	5.72	5.79	10.60	16.13	15.03	
Lane Group LOS	C	A	A	B	B	B	
Critical Lane Group	No	No	Yes	No	Yes	No	
50th-Percentile Queue Length [veh]	0.54	1.97	1.91	3.29	1.32	0.80	
50th-Percentile Queue Length [ft]	13.60	49.16	47.82	82.21	32.90	20.05	
95th-Percentile Queue Length [veh]	0.98	3.54	3.44	5.92	2.37	1.44	
95th-Percentile Queue Length [ft]	24.48	88.48	86.07	147.98	59.23	36.08	

Movement, Approach, & Intersection Results

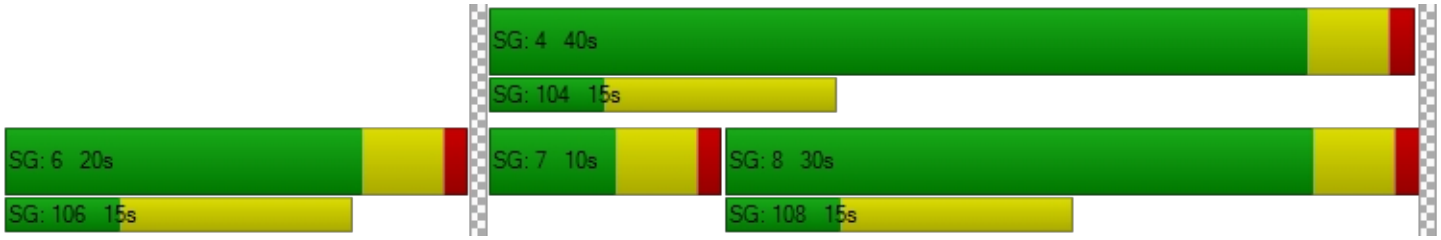
d_M, Delay for Movement [s/veh]	23.00	5.75	5.79	0.00	10.60	0.00	16.13	15.03	0.00	0.00	0.00	0.00
Movement LOS	C	A	A		B		B	B				
d_A, Approach Delay [s/veh]	6.40			10.60			15.70			0.00		
Approach LOS	A			B			B			A		
d_I, Intersection Delay [s/veh]	9.66											
Intersection LOS	A											
Intersection V/C	0.674											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.786	0.000	2.536	1.896
Crosswalk LOS	C	F	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1183	850	517	0
d_b, Bicycle Delay [s]	5.00	9.92	16.50	30.00
l_b,int, Bicycle LOS Score for Intersection	2.724	2.536	2.035	4.132
Bicycle LOS	B	B	B	D

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 17: Main Street & SR 91 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	13.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.698

Intersection Setup

Name	Main Street			Main Street			SR-91 WB Ramps			SR-91 WB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			No			Yes		

Volumes

Name	Main Street			Main Street			SR-91 WB Ramps			SR-91 WB Ramps		
Base Volume Input [veh/h]	1	644	158	109	802	0	0	0	0	259	0	329
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	644	158	109	802	0	0	0	0	259	0	329
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	161	40	27	201	0	0	0	0	65	0	82
Total Analysis Volume [veh/h]	1	644	158	109	802	0	0	0	0	259	0	329
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	7	4	0	3	8	0	0	0	0	2	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	30	30	0	0	0	0	30	0	0
Amber [s]	3.5	3.5	0.0	3.5	3.5	0.0	0.0	0.0	0.0	3.5	0.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	10	25	0	11	26	0	0	0	0	24	0	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	5	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	10	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	2.5	2.5	0.0	0.0	0.0	0.0	2.5	0.0	0.0
Minimum Recall	No	No		No	No					No		
Maximum Recall	No	No		No	No					No		
Pedestrian Recall	No	No		No	No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C		L	R
C, Cycle Length [s]	40	40	40	40	40		40	40
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	0	12	12	4	16		11	11
g / C, Green / Cycle	0.00	0.30	0.30	0.09	0.39		0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.00	0.22	0.22	0.06	0.23		0.15	0.21
s, saturation flow rate [veh/h]	1781	1870	1744	1781	3560		1781	1589
c, Capacity [veh/h]	3	561	524	157	1377		495	442
d1, Uniform Delay [s]	20.16	12.72	12.73	17.90	9.81		12.34	13.30
k, delay calibration	0.11	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	70.34	1.93	2.08	5.42	0.39		0.86	2.52
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.38	0.74	0.74	0.69	0.58		0.52	0.75
d, Delay for Lane Group [s/veh]	90.51	14.65	14.81	23.32	10.20		13.20	15.82
Lane Group LOS	F	B	B	C	B		B	B
Critical Lane Group	No	No	Yes	Yes	No		No	Yes
50th-Percentile Queue Length [veh]	0.06	2.94	2.77	1.09	2.14		1.70	2.47
50th-Percentile Queue Length [ft]	1.51	73.49	69.27	27.17	53.47		42.40	61.72
95th-Percentile Queue Length [veh]	0.11	5.29	4.99	1.96	3.85		3.05	4.44
95th-Percentile Queue Length [ft]	2.71	132.28	124.68	48.91	96.24		76.33	111.10

Movement, Approach, & Intersection Results

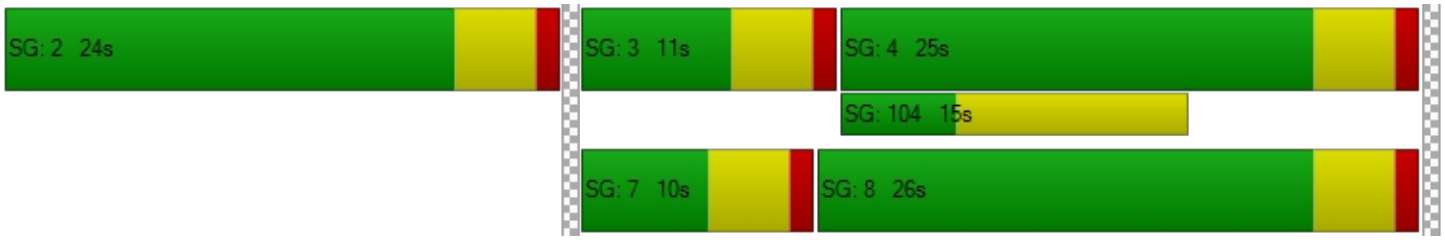
d_M, Delay for Movement [s/veh]	90.51	14.70	14.81	23.32	10.20	0.00	0.00	0.00	0.00	13.20	0.00	15.82
Movement LOS	F	B	B	C	B					B		B
d_A, Approach Delay [s/veh]	14.82			11.77			0.00			14.66		
Approach LOS	B			B			A			B		
d_I, Intersection Delay [s/veh]	13.57											
Intersection LOS	B											
Intersection V/C	0.698											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.199
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	683	717	0	0
d_b, Bicycle Delay [s]	13.00	12.35	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	2.222	2.311	4.132	4.132
Bicycle LOS	B	B	D	D

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 21: I-110 NB On-Ramp & 190th Street

Control Type:	Signalized	Delay (sec / veh):	7.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.598

Intersection Setup

Name	I-110 NB On Ramp			I-110 NB On Ramp			190th Street			190th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	No			Yes			No			No		

Volumes

Name	I-110 NB On Ramp			I-110 NB On Ramp			190th Street			190th Street		
Base Volume Input [veh/h]	0	0	0	0	0	0	459	1373	0	0	762	337
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	459	1373	0	0	762	337
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	115	343	0	0	191	84
Total Analysis Volume [veh/h]	0	0	0	0	0	0	459	1373	0	0	762	337
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	0	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	0	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	30	30	0
Amber [s]	0.0	3.5	0.0	0.0	0.0	0.0	3.5	3.5	0.0	3.5	3.5	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	17	0	0	0	0	21	33	0	10	22	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.5	0.0	0.0	0.0	0.0	2.5	2.5	0.0	2.5	2.5	0.0
Minimum Recall		No					No	No		No	No	
Maximum Recall		No					No	No		No	No	
Pedestrian Recall		No					No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C		L	C	C	L	C	R
C, Cycle Length [s]	31		31	31	31	31	31	31
L, Total Lost Time per Cycle [s]	4.50		4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50		2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	0		7	18	18	0	11	11
g / C, Green / Cycle	0.00		0.22	0.57	0.57	0.00	0.34	0.34
(v / s)_i Volume / Saturation Flow Rate	0.00		0.13	0.37	0.37	0.00	0.21	0.21
s, saturation flow rate [veh/h]	1870		3459	1870	1870	1781	3560	1589
c, Capacity [veh/h]	0		774	1060	1060	0	1222	546
d1, Uniform Delay [s]	0.00		10.84	4.62	4.62	0.00	8.56	8.54
k, delay calibration	0.11		0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00		0.73	0.67	0.67	0.00	0.53	1.14
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00		0.59	0.65	0.65	0.00	0.62	0.62
d, Delay for Lane Group [s/veh]	0.00		11.57	5.29	5.29	0.00	9.09	9.68
Lane Group LOS	A		B	A	A	A	A	A
Critical Lane Group	No		No	Yes	No	No	No	No
50th-Percentile Queue Length [veh]	0.00		1.09	1.14	1.14	0.00	1.45	1.37
50th-Percentile Queue Length [ft]	0.00		27.29	28.47	28.47	0.00	36.13	34.24
95th-Percentile Queue Length [veh]	0.00		1.97	2.05	2.05	0.00	2.60	2.47
95th-Percentile Queue Length [ft]	0.00		49.13	51.25	51.25	0.00	65.04	61.64

Movement, Approach, & Intersection Results

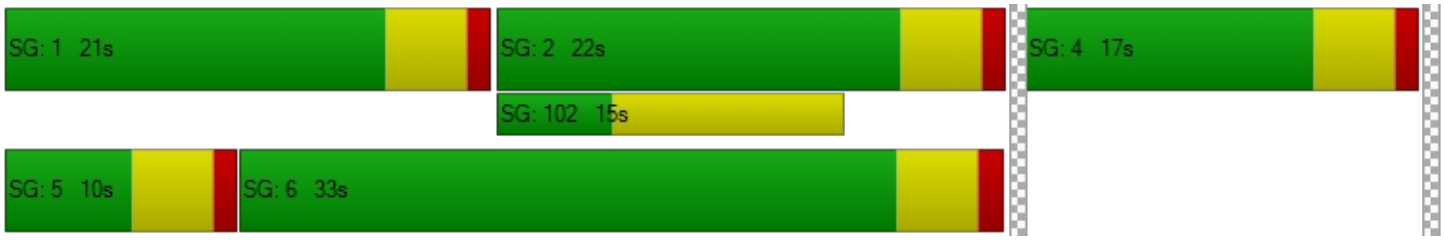
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00	11.57	5.29	5.29	0.00	9.09	9.68
Movement LOS	A	A	A				B	A	A	A	A	A
d_A, Approach Delay [s/veh]	0.00			0.00			6.87			9.27		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	7.77											
Intersection LOS	A											
Intersection V/C	0.598											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	21.68	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	2.084	0.000	0.000
Crosswalk LOS	F	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	417	0	950	583
d_b, Bicycle Delay [s]	18.80	30.00	8.27	15.05
I_b,int, Bicycle LOS Score for Intersection	1.560	4.132	3.071	2.466
Bicycle LOS	A	D	C	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 22: I-110 SB Off-Ramp & 190th Street

Control Type:	Signalized	Delay (sec / veh):	13.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.824

Intersection Setup

Name	I-110 SB Off-Ramp		190th Street		190th Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	I-110 SB Off-Ramp		190th Street		190th Street	
Base Volume Input [veh/h]	397	471	0	1443	756	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	397	471	0	1443	756	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	99	118	0	361	189	0
Total Analysis Volume [veh/h]	397	471	0	1443	756	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	8	0	0	6	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.5	0.0	0.0	3.5	3.5	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	26	0	0	34	34	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	2.5	2.5	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	54	54	54	54
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	19	19	26	26
g / C, Green / Cycle	0.35	0.35	0.48	0.48
(v / s)_i Volume / Saturation Flow Rate	0.22	0.30	0.41	0.15
s, saturation flow rate [veh/h]	1781	1589	3560	5094
c, Capacity [veh/h]	629	561	1708	2443
d1, Uniform Delay [s]	14.50	16.01	12.26	8.56
k, delay calibration	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.05	3.44	1.22	0.07
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.63	0.84	0.84	0.31
d, Delay for Lane Group [s/veh]	15.55	19.45	13.48	8.63
Lane Group LOS	B	B	B	A
Critical Lane Group	No	Yes	Yes	No
50th-Percentile Queue Length [veh]	3.64	5.07	6.21	1.46
50th-Percentile Queue Length [ft]	91.03	126.68	155.17	36.49
95th-Percentile Queue Length [veh]	6.55	8.76	10.29	2.63
95th-Percentile Queue Length [ft]	163.86	218.97	257.32	65.68

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	15.55	19.45	0.00	13.48	8.63	0.00
Movement LOS	B	B		B	A	
d_A, Approach Delay [s/veh]	17.67		13.48		8.63	
Approach LOS	B		B		A	
d_I, Intersection Delay [s/veh]	13.47					
Intersection LOS	B					
Intersection V/C	0.824					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.119	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
I_b,int, Bicycle LOS Score for Intersection	4.132	5.323	4.548
Bicycle LOS	D	F	E

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	All-way stop	Delay (sec / veh):	136.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.629

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	62	539	739	171	334	261
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	62	539	739	171	334	261
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	135	185	43	84	65
Total Analysis Volume [veh/h]	62	539	739	171	334	261
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	474	539	739	484	439	503
Degree of Utilization, x	0.13	1.03	1.63	0.35	0.68	0.59

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.45	15.33	42.23	1.57	4.93	3.79
95th-Percentile Queue Length [ft]	11.20	383.35	1055.76	39.37	123.31	94.64
Approach Delay [s/veh]	67.67		256.78		23.08	
Approach LOS	F		F		C	
Intersection Delay [s/veh]	136.79					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 27: Figueroa Street & I-110 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	17.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.734

Intersection Setup

Name	Figueroa Street		Figueroa Street		I-110 NB Ramps	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name	Figueroa Street		Figueroa Street		I-110 NB Ramps	
Base Volume Input [veh/h]	508	424	897	303	464	139
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	508	424	897	303	464	139
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	127	106	224	76	116	35
Total Analysis Volume [veh/h]	508	424	897	303	464	139
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	7	4	8	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	5	5	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.5	3.5	3.5	0.0	3.5	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	16	41	25	0	19	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	10	10	0	10	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	2.5	0.0	2.5	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	C
C, Cycle Length [s]	55	55	55	55	55	55
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	11	33	18	18	12	12
g / C, Green / Cycle	0.20	0.61	0.33	0.33	0.23	0.23
(v / s)_i Volume / Saturation Flow Rate	0.15	0.12	0.25	0.19	0.17	0.17
s, saturation flow rate [veh/h]	3459	3560	3560	1589	1781	1685
c, Capacity [veh/h]	697	2168	1158	517	405	383
d1, Uniform Delay [s]	20.52	4.77	16.71	15.45	19.84	19.86
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.48	0.04	1.14	1.06	3.03	3.23
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.73	0.20	0.77	0.59	0.76	0.77
d, Delay for Lane Group [s/veh]	22.00	4.81	17.85	16.51	22.87	23.09
Lane Group LOS	C	A	B	B	C	C
Critical Lane Group	Yes	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh]	2.90	0.75	4.62	2.92	3.67	3.50
50th-Percentile Queue Length [ft]	72.62	18.83	115.38	72.98	91.68	87.56
95th-Percentile Queue Length [veh]	5.23	1.36	8.14	5.25	6.60	6.30
95th-Percentile Queue Length [ft]	130.72	33.89	203.47	131.37	165.02	157.61

Movement, Approach, & Intersection Results

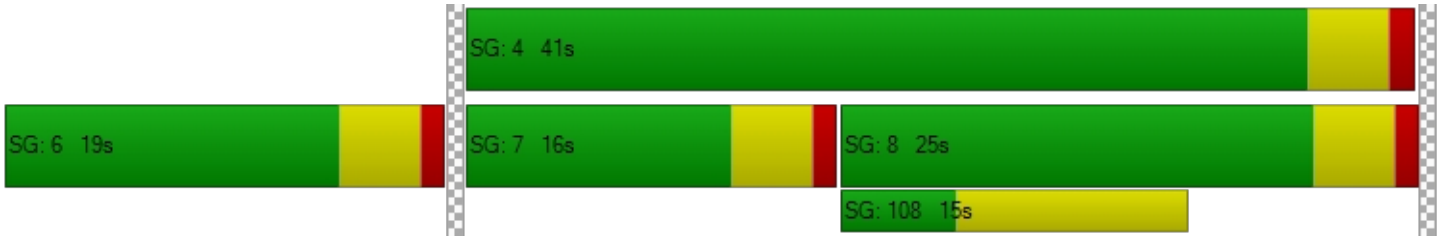
d_M, Delay for Movement [s/veh]	22.00	4.81	17.85	16.51	22.94	23.09
Movement LOS	C	A	B	B	C	C
d_A, Approach Delay [s/veh]	14.18		17.51		22.98	
Approach LOS	B		B		C	
d_I, Intersection Delay [s/veh]	17.58					
Intersection LOS	B					
Intersection V/C	0.734					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.456
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.901	5.122	5.127
Bicycle LOS	E	F	F

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 28: SR 91 EB Ramps & Albertoni Street

Control Type:	Signalized	Delay (sec / veh):	12.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.698

Intersection Setup

Name	SR 91 EB Ramps		Albertoni Street		Albertoni Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	SR 91 EB Ramps		Albertoni Street		Albertoni Street	
Base Volume Input [veh/h]	430	366	231	823	356	63
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	430	366	231	823	356	63
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	108	92	58	206	89	16
Total Analysis Volume [veh/h]	430	366	231	823	356	63
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal group	8	0	1	6	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.5	0.0	3.5	3.5	3.5	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	29	0	11	31	20	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	2.5	2.5	2.5	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	L	C	C	C
C, Cycle Length [s]	37	37	37	37	37	37
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	12	12	5	16	7	7
g / C, Green / Cycle	0.33	0.33	0.12	0.43	0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.24	0.23	0.07	0.23	0.11	0.12
s, saturation flow rate [veh/h]	1781	1589	3459	3560	1870	1776
c, Capacity [veh/h]	585	522	426	1534	350	332
d1, Uniform Delay [s]	11.11	10.95	15.39	7.87	13.89	13.99
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.82	1.73	1.08	0.29	1.64	1.97
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.74	0.70	0.54	0.54	0.60	0.63
d, Delay for Lane Group [s/veh]	12.93	12.68	16.47	8.16	15.53	15.96
Lane Group LOS	B	B	B	A	B	B
Critical Lane Group	Yes	No	No	Yes	No	No
50th-Percentile Queue Length [veh]	2.60	2.18	0.83	1.67	1.46	1.49
50th-Percentile Queue Length [ft]	65.01	54.59	20.72	41.71	36.55	37.33
95th-Percentile Queue Length [veh]	4.68	3.93	1.49	3.00	2.63	2.69
95th-Percentile Queue Length [ft]	117.02	98.26	37.29	75.08	65.79	67.19

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	12.93	12.68	16.47	8.16	15.71	15.96
Movement LOS	B	B	B	A	B	B
d_A, Approach Delay [s/veh]	12.82		9.98		15.74	
Approach LOS	B		A		B	
d_I, Intersection Delay [s/veh]	12.04					
Intersection LOS	B					
Intersection V/C	0.698					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	2.377	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.132	5.002	4.478
Bicycle LOS	D	F	E

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-