APPENDIX TRA

TRANSPORTATION ANALYSIS

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REVISED LOCAL CIRCULATION ANALYSIS
LENNAR DEL AMO

Torrance, California
September 16, 2024
(original dated March 14, 2024)

Prepared for:
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EXECUTIVE SUMMARY

Project Description

- The Project site is the northeast quadrant of the Del Amo Fashion Center Mall, located South of Fashion Way, West of Madrona Avenue, North of West Carson Street, and East of Del Amo Circle, a "private" street, in the City of Torrance, California. The subject property is located within the Hawthorne Boulevard Corridor Specific Plan Area DA-1- "Del Amo Sub-Business District One" implementing the City of Torrance 2021 Housing Element of the General Plan." The site was a former parking lot for the mall and includes an office/laboratory building in the northeast corner of the property, occupied by Neoteryx, and a Black Angus Steakhouse restaurant in the southeast corner of the property, both of which are currently operational. Access to the Project site is now provided by two (2) driveways on Madrona Avenue, one "right-turn only" driveway, and one "full access" driveway, two (2) "full access" driveways on Del Amo Circle E. and two (2) driveways on Fashion Way, of which the western driveway is right-turn only and the easterly driveway is exit-only (left and right). Both driveways on Fashion Way are currently closed to the public. No vehicular access from Carson Street is now allowed. It should be noted that the existing driveway on Fashion Way is gated and closed for public access.

- The proposed Project includes the demolition of the existing Neoteryx building and Black Angus Steakhouse restaurant and the construction of a 272 multifamily residential dwelling units (DU) Project. The preliminary mix of residential uses would include three-story townhomes and four-story townhomes, with a mix 52 two-bedroom units, 205 three-bedrooms units and 15 four-bedroom units. Parking for the Project would be provided via 544 garage spaces, 142 on-site surface parking, and 16 private driveways for a total supply of 702 parking spaces. It should be noted that based on a review of the current Project site plan, the proposed Project has been reduced in size and now includes construction of a 260 multifamily residential DU community, consisting of three-story townhomes and four-story townhomes, with a mix of 52 one-bedroom and two-bedroom units and 208 three-bedrooms units. However, this revised traffic assessment conservatively evaluates the potential impact of 272 dwelling units.

- As indicated previously, Del Amo Circle is a "private" street fully owned by Simon Properties that serves the Del Amo Fashion Center. As such, to minimize conflicts between the two properties, Simon Properties would not permit project access along Del Amo Circle and thus the Applicant (Lennar) worked closely with Simon Properties to develop a site plan to provide access points for which both parties deemed appropriate for the Project site. Based on discussions between the Applicant (Lennar) and Simon Properties, as part of the proposed Project, Del Amo Circle will be converted from a four-lane roadway to a two-lane roadway with 80 on-street parking stalls intended for exclusive use by visitors to the Mall. Additionally, vehicular access would be provided via the one (1) existing (northerly) full access unsignalized driveway located on Madrona Avenue which will be aligned with the

existing median break between El Dorado Street and Onrado Street and one (1) proposed full access unsignalized driveway on Fashion Way.

- The twenty-seven (27) key study intersections selected for evaluation in this report provides local and regional access to the study area. They consist of the following:

1. I-405 NB On-Ramp at Redondo Beach Boulevard (Torrance/Caltrans)
2. Prairie Avenue at Redondo Beach Boulevard (Torrance)
3. Prairie Avenue at Artesia Boulevard (Torrance)
4. Prairie Avenue at West 182nd Street (Torrance)
5. Prairie Avenue at West 190th Street (Torrance)
6. Madrona Avenue at Del Amo Boulevard (Torrance)
7. Anza Avenue at Torrance Boulevard (Torrance)
8. Hawthorne Boulevard at Torrance Boulevard (Torrance/Caltrans)
9. Madrona Avenue at Torrance Boulevard (Torrance)
10. Maple Avenue at Torrance Boulevard (Torrance)
11. Crenshaw Boulevard at Torrance Boulevard (Torrance)
12. Hawthorne Boulevard at Fashion Way (Torrance/Caltrans)
13. Madrona Avenue at Fashion Way (Torrance)
14. Anza Avenue at Carson Street (Torrance)
15. Hawthorne Boulevard at Carson Street (Torrance/Caltrans)
16. Del Amo Circle East at Carson Street (Torrance)
17. Madrona Avenue at Carson Street (Torrance)
18. Maple Ave at Carson Street (Torrance)
19. Crenshaw Boulevard at Carson Street (Torrance)
20. Anza Avenue at Sepulveda Boulevard (Torrance)
21. Hawthorne Boulevard at Sepulveda Boulevard (Torrance/Caltrans)
22. Madison Street at Sepulveda Boulevard (Torrance)
23. Del Amo Circle East at Sepulveda Boulevard (Torrance)
24. Madrona Avenue at Sepulveda Boulevard (Torrance)
25. Maple Avenue at Sepulveda Boulevard (Torrance)
26. Crenshaw Boulevard at Sepulveda Boulevard (Torrance)
27. Western Avenue at Carson Street (Torrance/Caltrans)

Traffic Impact Analysis

Existing Traffic Conditions

- For Existing traffic conditions, three (3) of the twenty-seven (27) study intersections currently operate at unacceptable level of service during the AM and/or PM peak hours when compared to the LOS standards defined in this report. The remaining study intersections operate at acceptable level of service during the AM and PM peak hours. The intersections operating adversely are as follows:

	AM Peak Hour		PM Peak Hour	
Key Intersection	ICU	LOS	ICU	LOS
2. Prairie Avenue at Redondo Beach Boulevard	0.917	E	0.975	E
26. Crenshaw Boulevard at Sepulveda Boulevard	--	--	0.946	E
27. Western Avenue at Carson Street	--	--	0.902	E

Existing With Ambient Growth With Project Traffic Conditions

- For Existing with Ambient Growth with Project traffic conditions, four (4) of the twenty-seven (27) study intersections are forecast to continue to operate at unacceptable level of service during the AM and PM peak hours, based on the LOS standards specified in this report. The remaining study intersections are forecast to operate at acceptable level of service during the AM and PM peak hours. The intersections forecast to operate adversely are as follows:

	AM Peak Hour		PM Peak Hour	
Key Intersection	ICU	LOS	ICU	LOS
2. Prairie Avenue at Redondo Beach Boulevard	0.953	E	1.002	F
21. Hawthorne Boulevard at Sepulveda Boulevard	--	--	0.905	E
26. Crenshaw Boulevard at Sepulveda Boulevard	--	--	0.964	E
27. Western Avenue at Carson Street	0.901	E	0.920	E

One (1) study intersection exceeds the level of service thresholds and require Project-related improvements under the Existing with Ambient Growth with Project traffic conditions, which includes Prairie Avenue at Redondo Beach Boulevard (Intersection #2). However, implementation of planned and/or recommended improvements at the intersection will help offset the Project's increment.

Traffic Impact Analysis – Caltrans Requirements (HCM Methodology)

Existing Traffic Conditions (HCM Methodology)

- For Existing traffic conditions, all six (6) state-controlled study intersections currently operate at acceptable level of service D or better during the AM and PM peak hours.

Existing With Ambient Growth With Project Traffic Conditions (HCM Methodology)

- For Existing with Ambient Growth With Project traffic conditions, all six (6) state-controlled study intersections are forecast to operate at acceptable level of service D or better during the AM and PM peak hours. Since the proposed Project is not anticipated to exceed the level of service thresholds at any of the state-controlled study intersections, no improvements are recommended.

Site Access Evaluation

- The two (2) project driveways for Existing with Ambient Growth with Project traffic conditions are forecast to operate at acceptable levels of service in the AM and PM peak hours under all Project Option scenarios.
- A line of site evaluation was completed for the two (2) project driveways and indicates that the sight lines at all project driveways are expected to be adequate.
- A queuing evaluation was completed for the northbound left-turn lane at the proposed Project Driveway B along Madrona to validate that the storage provided is adequate to accommodate the proposed Project traffic. The queuing evaluation indicates that the proposed storage is considered adequate.
- A queuing evaluation was completed for the eastbound left and right turn movements at Madrona Avenue/Fashion Way to determine if there is adequate storage between the intersection and the proposed driveway along Fashion Way. The queuing evaluation indicates that the anticipated queue would not affect the ingress and egress to and from the Project site.
- Access to and from the site via a trash truck and fire truck are considered adequate.

Recommended Improvements

- The results of the Existing with Ambient Growth With Project traffic conditions level of service analyses indicates that the proposed Project exceeds the thresholds identified in this report at one (1) study intersection, at the intersection of Prairie Avenue/Redondo Beach Boulevard (Intersection #2). Subject to the City of Torrance review and concurrence, the Project may be expected to construct the recommended improvements, which consist of the following:

    - **Intersection 2 – Prairie Avenue at Redondo Beach Boulevard:** Restripe the southbound approach and departure to include an additional through lane. Modify the existing traffic signal as necessary. These improvements are consistent with the City of Torrance Citywide Traffic Analysis prepared by Albert Grover & Associates in March 2019. It should be noted that only a portion of the Torrance Citywide Improvements needed to be implemented to offset the added Project volumes. Implementation of this improvement will require the review/approval of the City of Torrance.

REVISED LOCAL CIRCULATION ANALYSIS

LENNAR DEL AMO

Torrance, California

September 16, 2024

(original dated March 14, 2024)

1.0 INTRODUCTION

This local circulation analysis evaluates the potential traffic impacts and circulation needs associated with the proposed Lennar Del Amo Multifamily Residential Project (hereinafter referred to as Project) in the City of Torrance, California. This traffic analysis has been updated to address comments by City staff on March 2024 study and reflect the current Project development totals.

The subject property is a 16.37± acre rectangular-shaped parcel of land that is located at the northeast quadrant of the Del Amo Fashion Center Mall. The Project site was a former parking lot for the mall and is now developed with an office/laboratory building in the northeast corner of the property, occupied by Neoteryx, and a Black Angus Steakhouse restaurant in the southeast corner of the property, both of which are currently operational. The proposed Project is a medium density "ownership" condominium community adjoining the Del Amo Fashion Center Mall that includes the development of 272 multifamily residential dwelling units (DU). The Project would include two-story townhomes, three-story townhomes and four-story townhomes, with a mix of 52 two-bedroom units, 205 three-bedrooms units and 15 four-bedroom units. It should be noted that based on a review of the current Project site plan, the proposed Project has been reduced in size and now includes construction of a 260 multifamily residential DU community, consisting of three-story townhomes and four-story townhomes, with a mix of 52 one-bedroom and two-bedroom units and 208 three-bedrooms units. However, this revised traffic assessment conservatively evaluates the potential impact of 272 dwelling units.

1.1 Scope of Work

This report documents the findings and recommendations of a local circulation analysis conducted by Linscott, Law & Greenspan Engineers (LLG) to determine the potential impacts the Project may have on the local street system in the immediate vicinity of the Project site. The traffic impact analysis evaluates the operating conditions at twenty-seven (27) key study intersections, estimates the trip generation potential of the Project, and forecasts future (existing and near-term) operating conditions without and with the Project.

The Scope of Work for this local circulation analysis, inclusive of study intersections, was developed in collaboration with City staff. This local circulation analysis has been prepared according to the traffic impact requirements of the City of Torrance. The *City of Torrance Traffic Circulation Analysis (TCA) Guidelines (www.torranceca.gov/tca-guidelines)* was used to assess the potential

traffic impacts of development projects within the City jurisdiction, inclusive of the significant impact thresholds.

The Project site has been visited and an inventory of adjacent area roadways and intersections was performed. Existing traffic count information has been compiled and is utilized in this report in support of a detailed intersection capacity analysis.

1.2 Study Area

The twenty-seven (27) key study intersections selected for evaluation in this report provide local and regional access to the study area. They consist of the following:

1. I-405 NB On-Ramp at Redondo Beach Boulevard (Torrance/Caltrans)
2. Prairie Avenue at Redondo Beach Boulevard (Torrance)
3. Prairie Avenue at Artesia Boulevard (Torrance)
4. Prairie Avenue at West 182nd Street (Torrance)
5. Prairie Avenue at West 190th Street (Torrance)
6. Madrona Avenue at Del Amo Boulevard (Torrance)
7. Anza Avenue at Torrance Boulevard (Torrance)
8. Hawthorne Boulevard at Torrance Boulevard (Torrance/Caltrans)
9. Madrona Avenue at Torrance Boulevard (Torrance)
10. Maple Avenue at Torrance Boulevard (Torrance)
11. Crenshaw Boulevard at Torrance Boulevard (Torrance)
12. Hawthorne Boulevard at Fashion Way (Torrance/Caltrans)
13. Madrona Avenue at Fashion Way (Torrance)
14. Anza Avenue at Carson Street (Torrance)
15. Hawthorne Boulevard at Carson Street (Torrance/Caltrans)
16. Del Amo Circle East at Carson Street (Torrance)
17. Madrona Avenue at Carson Street (Torrance)
18. Maple Ave at Carson Street (Torrance)
19. Crenshaw Boulevard at Carson Street (Torrance)
20. Anza Avenue at Sepulveda Boulevard (Torrance)
21. Hawthorne Boulevard at Sepulveda Boulevard (Torrance/Caltrans)
22. Madison Street at Sepulveda Boulevard (Torrance)
23. Del Amo Circle East at Sepulveda Boulevard (Torrance)
24. Madrona Avenue at Sepulveda Boulevard (Torrance)
25. Maple Avenue at Sepulveda Boulevard (Torrance)
26. Crenshaw Boulevard at Sepulveda Boulevard (Torrance)
27. Western Avenue at Carson Street (Torrance/Caltrans)

Figure 1-1 presents a Vicinity Map, which illustrates the general location of the Project and depicts the study intersections and surrounding street system.

1.3 Local Circulation Analysis Components

The Volume-Capacity (V/C) and corresponding Level of Service (LOS) calculations at the key study intersections were used to evaluate the potential traffic-related impacts associated with area growth and the proposed Project. When necessary, this report recommends intersection improvements that may be required to accommodate future traffic volumes and restore/maintain an acceptable Level of Service and/or addresses the impact of the Project.

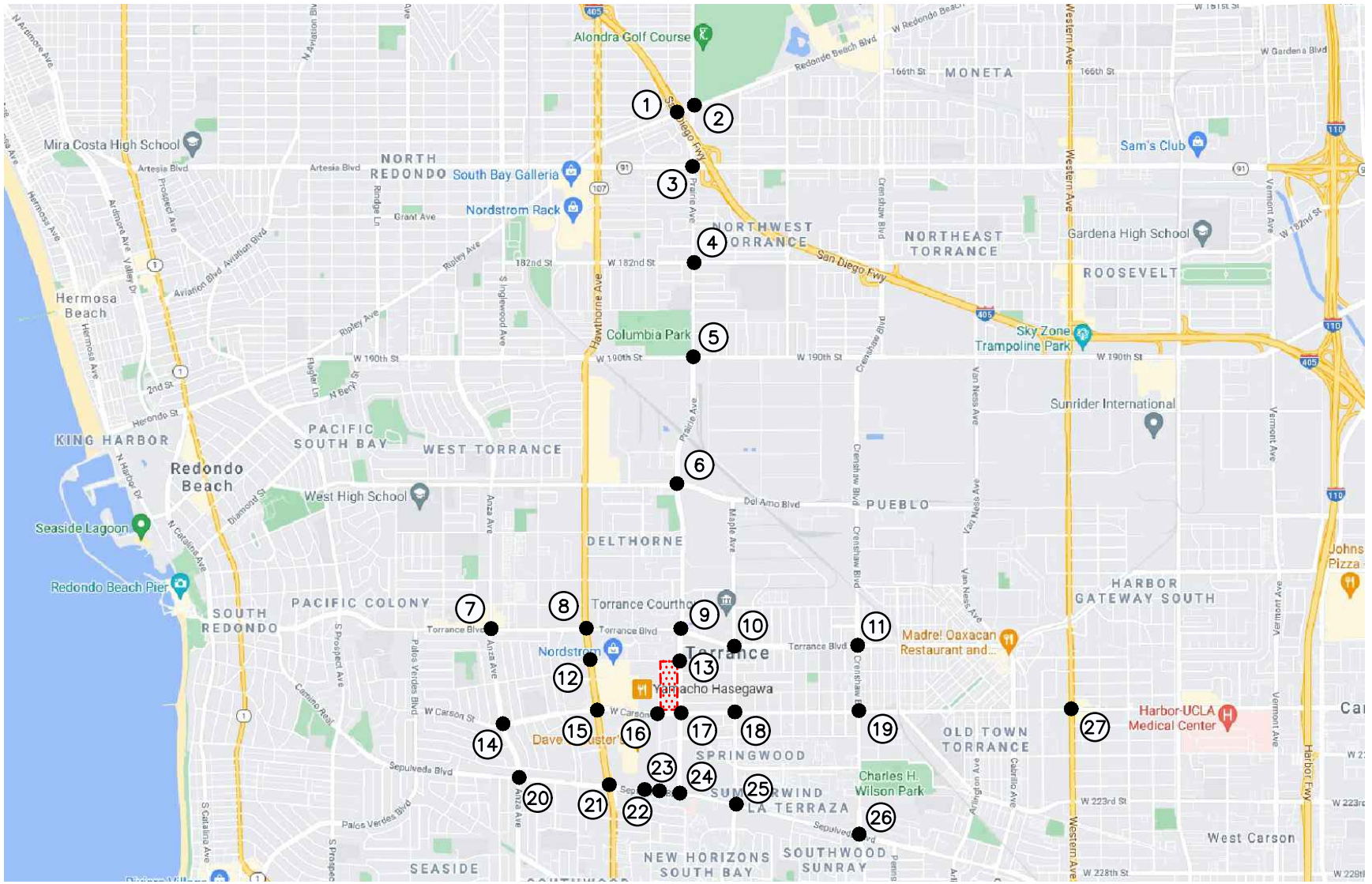
Included in this Traffic Impact Analysis are:

- Existing Traffic Counts,
- Estimated Project traffic generation/distribution/assignment,
- AM and PM peak hour LOS analyses for Existing Conditions,
- AM and PM peak hour LOS analyses for Existing with Ambient Growth to the Year 2028 (Near-term) conditions without and with Project traffic,
- State of California (Caltrans) analysis,
- Recommended Improvements to mitigate Project-Related impacts, and
- Site Access and Internal Circulation Evaluation, inclusive of conducting a queuing assessment for the eastbound approach on Fashion Way at Madrona Avenue to assess the potential impact of existing and/or vehicular queues that may impede westbound left-turn access to the subject property at the proposed driveway on Fashion Way.

1.4 Local Circulation Analysis Scenarios

The following scenarios are those for which volume-capacity (V/C) and corresponding LOS calculations have been performed at the key intersections for Existing and Year 2028 traffic conditions:

A. Existing Traffic Conditions,
B. Existing With Ambient Growth (Year 2028) Traffic Conditions,
C. Existing With Ambient Growth (Year 2028) With Project Traffic Conditions,
D. Scenario (C) With Recommended Improvements, if any.



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SOURCE: GOOGLE

KEY

(#) = STUDY INTERSECTION

= PROJECT SITE

NO SCALE

FIGURE 1-1

VICINITY MAP

LENNAR DEL AMO, TORRANCE

2.0 PROJECT DESCRIPTION AND LOCATION

The Project site is the northeast quadrant of the Del Amo Fashion Center Mall, located South of Fashion Way, West of Madrona Avenue, North of West Carson Street, and East of Del Amo Circle, a "private" street, in the City of Torrance, California. The subject property is located within the Hawthorne Boulevard Corridor Specific Plan Area DA-1- "Del Amo Sub-Business District One" implementing the City of Torrance 2021 Housing Element of the General Plan." The site was a former parking lot for the mall and includes an office/laboratory building in the northeast corner of the property, occupied by Neoteryx, and a Black Angus Steakhouse restaurant in the southeast corner of the property, both of which are currently operational. Access to the Project site is now provided by two (2) driveways on Madrona Avenue, one "right-turn only" driveway, and one "full access" driveway, two (2) "full access" driveways on Del Amo Circle E. and two (2) driveways on Fashion Way, of which the western driveway is right-turn only and the easternly driveway is exit-only (left and right). Both driveways on Fashion Way are currently closed to the public. No vehicular access from Carson Street is now allowed. It should be noted that the existing driveway on Fashion Way is gated and closed for public access. ***Figure 2-1*** presents existing aerial photograph of the Project site.

The proposed Project includes the demolition of the existing Neoteryx building and Black Angus Steakhouse restaurant and the construction of a 272 multifamily residential dwelling units (DU) Project. The preliminary mix of residential uses would include three-story townhomes and four-story townhomes, with a mix 52 two-bedroom units, 205 three-bedrooms units and 15 four-bedroom units. It should be noted that based on a review of the current Project site plan, the proposed Project has been reduced in size and now includes construction of a 260 multifamily residential DU community, consisting of three-story townhomes and four-story townhomes, with a mix of 52 one-bedroom and two-bedroom units and 208 three-bedrooms units. However, this revised traffic assessment conservatively evaluates the potential impact of 272 dwelling units.

Parking for the Project would be provided via 520 garage spaces, 155 on-site surface parking, and 24 private driveways for a total supply of 699 parking spaces. ***Figure 2-2*** presents the Project site plan prepared by KTGY, Architecture + Planning dated August 24, 2024.

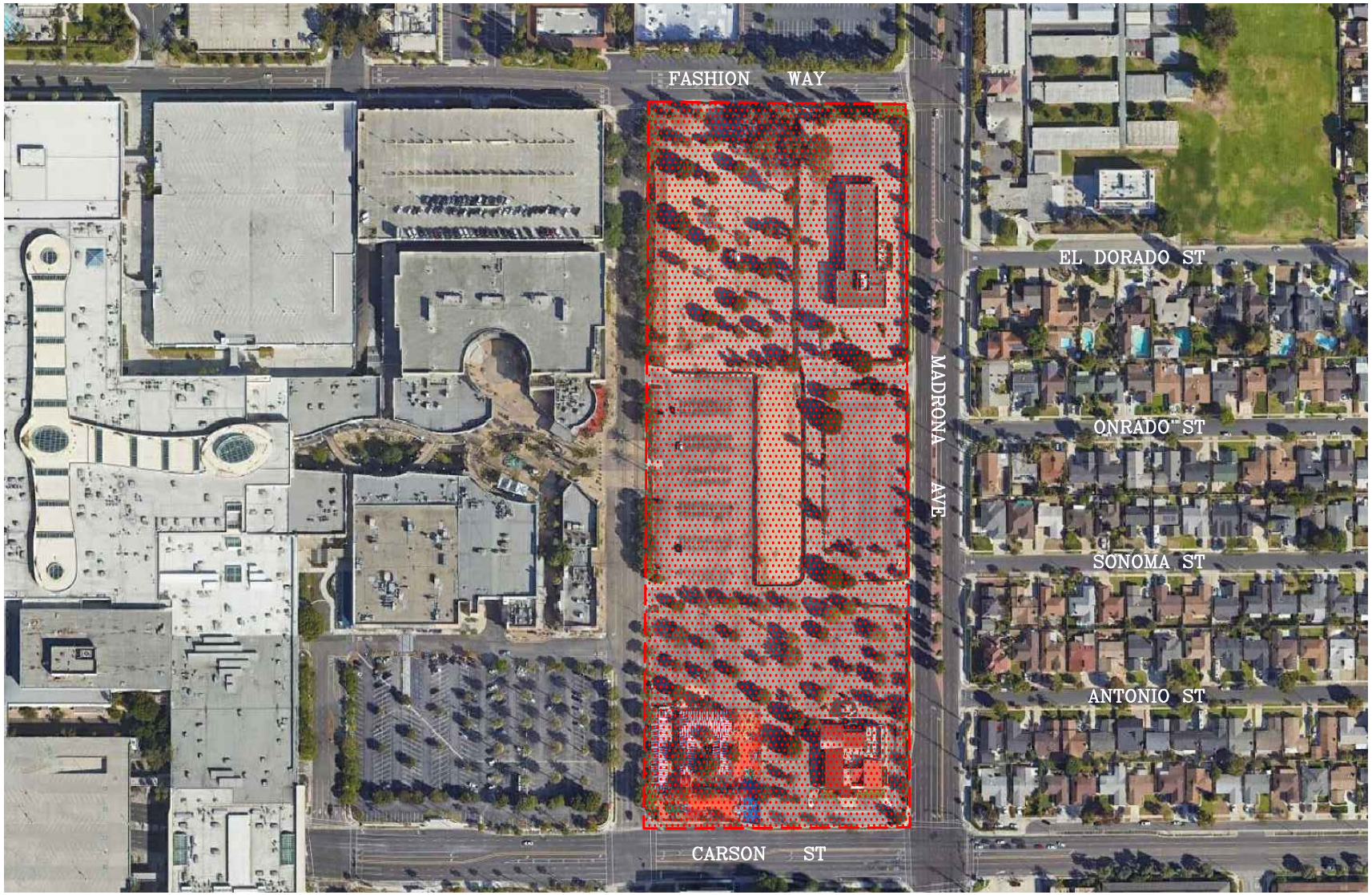
As indicated previously, Del Amo Circle is a "private" street fully owned by Simon Properties that serves the Del Amo Fashion Center. As such, to minimize conflicts between the two properties, Simon Properties would not permit project access along Del Amo Circle and thus the Applicant (Lennar) worked closely with Simon Properties to develop a site plan to provide access points for which both parties deemed appropriate for the Project site. Based on discussions between the Applicant (Lennar) and Simon Properties, as part of the proposed Project, Del Amo Circle will be converted from a four-lane roadway to a two-lane roadway with 80 on-street parking stalls intended for exclusive use by visitors to the Mall. Additionally, vehicular access would be provided via the one (1) existing (northerly) full access unsignalized driveway located on Madrona Avenue which will be aligned with the existing median break between El Dorado Street and Onrado Street and one (1) proposed full access unsignalized driveway on Fashion Way. A second driveway on Madrona

Avenue is proposed for "emergency vehicle access" only; this access will be positioned in the same location as the existing southerly "right-turn only" driveway on Madrona Avenue. *Figure 2-2* also illustrates the redesign of Del Amo Circle and the locations of the two (2) project driveways.

The Project is expected to be completed in the next several years or so but is dependent on several factors, including the timing of Project approval, Project funding, and market conditions. As such, in order to provide a conservative assessment, Year 2028 was utilized to assess the Project's potential opening year (full buildout/occupancy) traffic impacts within a near-term traffic setting.

2.1 Pedestrian Circulation

Pedestrian circulation will be provided via existing public sidewalks along Fashion Way, Madrona Avenue and Carson Street within the vicinity of the project frontage. The proposed Project will protect the existing sidewalk along project frontage and if necessary, repair or reconstruct sidewalks along the project frontage per the City's request. In addition, the Project is proposing to construct new sidewalks along its frontage along Del Amo Circle East and provide direct pedestrian connection to the Del Amo Fashion Center. The existing sidewalk system within the project vicinity provides direct connectivity to the surrounding commercial properties and major thoroughfares.



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SOURCE: GOOGLE

KEY

= PROJECT SITE

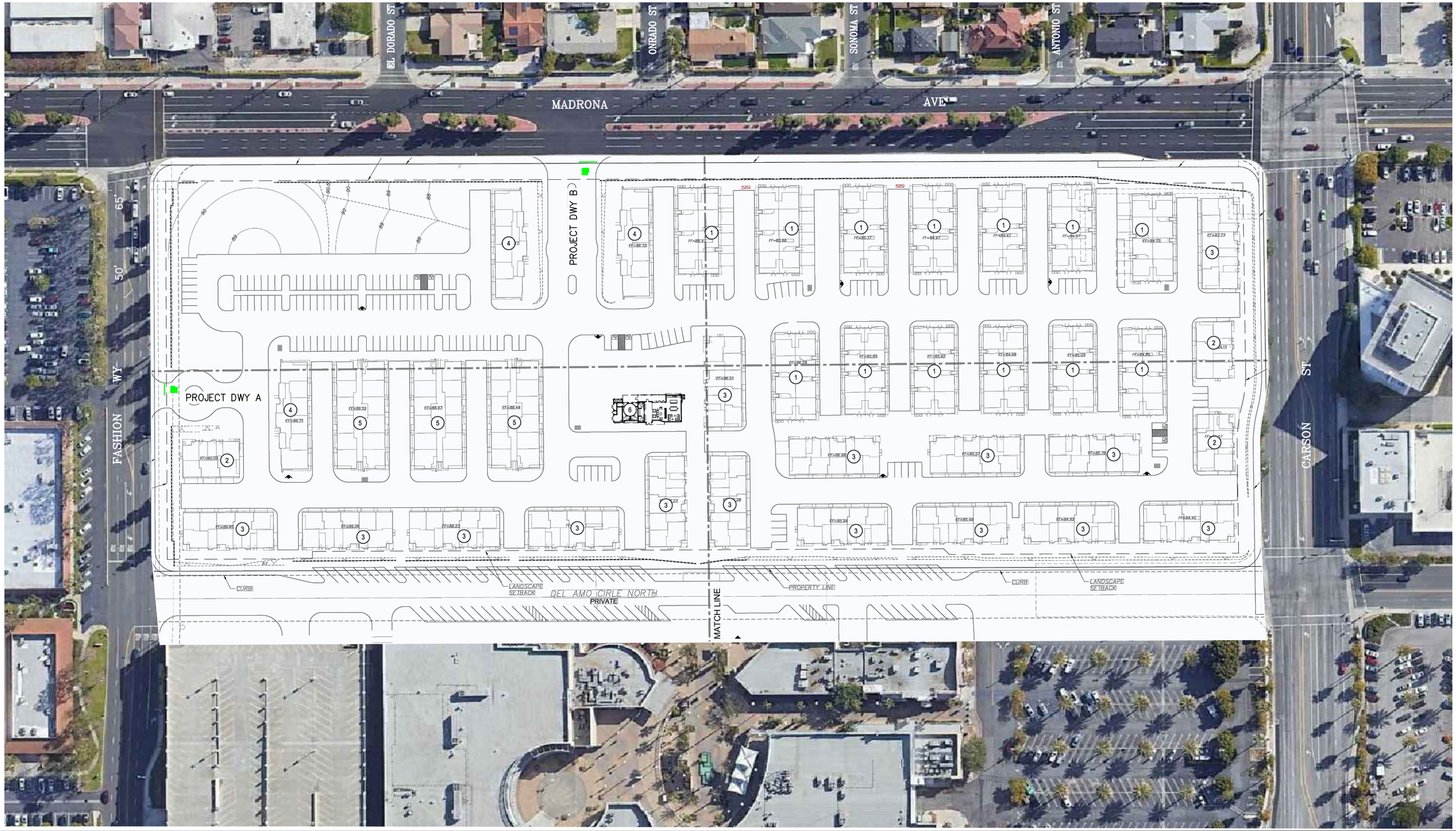
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NO SCALE

FIGURE 2-1

EXISTING AERIAL PHOTOGRAPH

LENNAR DEL AMO, TORRANCE



SOURCE: KTGY

LLG

N

NO SCALE

FIGURE 2-2

PROPOSED SITE PLAN

LENNAR DEL AMO, TORRANCE

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3.0 ANALYSIS CONDITIONS AND METHODOLOGY

3.1 Existing Street System

The principal local network of streets serving the proposed Project is Anza Avenue, Hawthorne Boulevard, Del Amo Circle East, Prairie Avenue/Madrona Avenue, Maple Avenue, Crenshaw Boulevard, Western Avenue, Sepulveda Boulevard, Carson Street, Fashion Way, Torrance Boulevard, Del Amo Boulevard, West 190th Street, West 182nd Street, Artesia Boulevard, and Redondo Beach Boulevard. The following discussion provides a brief synopsis of these key area roadways. The descriptions are based on an inventory of existing roadway conditions.

Anza Avenue is a north-south, four-lane, divided roadway located to the west of the Project site. The posted speed limit on Anza Avenue is 35 miles per hour (mph). On-street parking is generally not permitted along either side of the roadway within the vicinity of the Project site. The City of Torrance Circulation Element designates Anza Avenue as a Minor Arterial. The study intersections of Anza Avenue at Torrance Boulevard, Carson Street, and Sepulveda Boulevard are controlled by a traffic signal.

Hawthorne Boulevard is a north-south, eight-lane, divided roadway located to the west of the Project site. The posted speed limit on Hawthorne Boulevard is 40 mph. On-street parking is generally not permitted along either side of the roadway within the vicinity of the Project site. The City of Torrance Circulation Element designates Hawthorne Boulevard as a Principal Arterial. The study intersections of Hawthorne Boulevard at Torrance Boulevard, Fashion Way, Carson Street, and Sepulveda Boulevard are controlled by a traffic signal.

Del Amo Circle East is a north-south, four-lane, divided "private" roadway that borders the Project site. Del Amo Circle East becomes a three-lane, divided roadway south of Carson Street. The prima facie speed limit on Del Amo Circle East is 25 mph. On-street parking is generally not permitted along either side of the roadway within the vicinity of the Project. The study intersections of Del Amo Circle East at Carson Street and Sepulveda Boulevard are controlled by a traffic signal.

Prairie Avenue/Madrona Avenue is a north-south, four-lane divided roadway south of Plaza del Amo, six-lane, divided roadway north of Plaza del Amo, four-lane divided roadway between 186th Street to 176th Street, five-lane divided roadway between 176th Street to Artesia Boulevard, and a four-lane divided roadway north of Artesia Boulevard. Prairie Avenue becomes Madrona Avenue south of Del Amo Boulevard and borders the Project site. The posted speed limit on Prairie Avenue is 35 mph. The posted speed limit on Madrona Avenue is 40 mph between Del Amo Boulevard and Torrance Boulevard, and 35 mph south of Torrance Boulevard. On-street parking is generally not permitted along either side of the roadway within the vicinity of the Project, except for north of Redondo Beach Boulevard where parking is permitted on both sides of the roadway. The City of Torrance Circulation Element designates Prairie Avenue/Madrona Avenue as a Major Arterial. The study intersections of Prairie Avenue at Redondo Beach Boulevard, Artesia Boulevard, West 182nd Street, West 190th Street, and Del Amo Boulevard are controlled by a traffic signal. The study

intersections of Madrona Avenue at Torrance Boulevard, Fashion Way, Carson Street, and Sepulveda Boulevard are controlled by a traffic signal.

Maple Avenue is a north-south, two-lane divided roadway north of Torrance Boulevard, two-lane undivided roadway between Torrance Boulevard and Carson Street, two-lane divided roadway between Carson Street and Monterey Street, and a four-lane divided roadway south of Monterey Street. The posted speed limit on Maple Avenue is 30 mph north of Torrance Boulevard, 25 mph between Torrance Boulevard and Plaza del Amo, and 35 mph south of Plaza del Amo. On-street parking is generally not permitted along either side of the roadway within the vicinity of the Project, except for north of Torrance Boulevard where parking is permitted on both sides of the roadway. The City of Torrance Circulation Element designates Maple Avenue as a Collector. The study intersections of Maple Avenue at Torrance Boulevard, Carson Street, and Sepulveda Boulevard are controlled by a traffic signal.

Crenshaw Boulevard is a north-south, six-lane, divided roadway located east of the Project site. The posted speed limit on Crenshaw Boulevard is 40 mph north of Sepulveda Boulevard and 45 mph south of Sepulveda Boulevard. On-street parking is generally not permitted along either side of the roadway within the vicinity of the Project. The City of Torrance Circulation Element designates Crenshaw Boulevard as a Major Arterial. The study intersections of Crenshaw Boulevard at Torrance Boulevard, Carson Street, and Sepulveda Boulevard are controlled by a traffic signal.

Western Avenue is a north-south, five-lane divided roadway north of Carson Street and a four-lane divided roadway south of Carson Street located east of the Project site. The posted speed limit on Western Avenue is 40 mph. On-street parking is generally permitted along both sides of the roadway south of Carson Street and parking is permitted on the east side of the roadway north of Carson Street within the vicinity of the Project. The City of Torrance Circulation Element designates Western Avenue as a Major Arterial. The study intersection of Western Avenue at Carson Street is controlled by a traffic signal.

Sepulveda Boulevard is an east-west, four-lane divided roadway west of Anza Avenue, and a six-lane divided roadway east of Anza Avenue located south of the Project site. The posted speed limit on Sepulveda Boulevard is 40 mph west of Madrona Avenue and 45 mph east of Madrona Avenue. On-street parking is generally not permitted along either side of the roadway within the vicinity of the Project. The City of Torrance Circulation Element designates Sepulveda Boulevard as a Major Arterial.

Carson Street is an east-west, two-lane divided roadway west of Anza Avenue, four-lane divided roadway between Anza Avenue and Del Amo Circle West, five-lane divided roadway between Del Amo Circle West and Hawthorne Boulevard, six-lane divided between Hawthorne Boulevard and Madrona Avenue, and a four-lane divided roadway east of Madrona Avenue. Carson Street borders the Project site to the south. The posted speed limit on Carson Street is 35 mph. On-street parking is generally not permitted along either side of the roadway within the vicinity of the Project, except for west of Anza Avenue where parking is permitted on both sides of the roadway, and directly east of

Maple Avenue where parking is permitted on the south side of the roadway. The City of Torrance Circulation Element designates Carson Street as a Minor Arterial between Palos Verdes Boulevard and Hawthorne Boulevard and a Major Arterial east of Hawthorne Boulevard.

Fashion Way is an east-west, four-lane, divided roadway that borders the Project site to the north. The prima facie speed limit on Fashion Way is 25 mph. On-street parking is generally not permitted on either side of the roadway.

Torrance Boulevard is an east-west, six-lane divided roadway between Anza Avenue and Madrona Avenue, and a four-lane divided roadway east of Madrona Avenue located to the north of the Project site. The posted speed limit on Torrance Boulevard is 40 mph between Anza Avenue and Madrona Avenue and 35 mph east of Madrona Avenue. On-street parking is generally not permitted on either side of the roadway within the vicinity of the Project. The City of Torrance Circulation Element designates Torrance Boulevard as a Major Arterial.

Del Amo Boulevard is an east-west, four-lane, divided roadway north of the Project site. The posted speed limit on Del Amo Boulevard is 40 mph. On-street parking is generally not permitted on either side of the roadway within the vicinity of the Project, except for east of Prairie Avenue where parking is permitted on both sides of the roadway. The City of Torrance Circulation Element designates Del Amo Boulevard as a Major Arterial.

West 190th Street is an east-west, six-lane, divided roadway north of the Project site. The posted speed limit on West 190th Street is 40 mph west of Prairie Avenue and 45mph east of Prairie Avenue. On-street parking is generally not permitted on either side of the roadway within the vicinity of the Project. The City of Torrance Circulation Element designates West 190th Street as a Major Arterial.

West 182nd Street is an east-west, four-lane, undivided roadway north of the Project site. The posted speed limit on West 182nd Street is 35mph. On-street parking is generally permitted on both sides of the roadway within the vicinity of the Project. The City of Torrance Circulation Element designates West 182nd Street as a Minor Arterial.

Artesia Boulevard is an east-west, four-lane, divided roadway north of the Project site. The posted speed limit on Artesia Boulevard is 40 mph. On-street parking is generally permitted on both sides of the roadway within the vicinity of the Project. The City of Torrance Circulation Element designates Artesia Boulevard as a Major Arterial.

Redondo Beach Boulevard is an east-west, four-lane, divided roadway north of the Project site. The posted speed limit on Redondo Beach Boulevard is 35 mph. On-street parking is generally permitted on both sides of the roadway within the vicinity of the Project. The City of Torrance Circulation Element designates Redondo Beach Boulevard as a Major Arterial.

Figure 3-1 presents an inventory of the existing roadway conditions for the arterials and intersections evaluated in this report. This figure identifies the number of travel lanes for key arterials, as well as intersection configurations and controls for the key area intersections neighboring the Project site.

3.2 Existing Traffic Volumes

Manual vehicular turning movement counts were conducted at the twenty-seven (27) key study locations during the weekday morning and evening peak commuter periods to determine the existing AM and PM peak hour traffic volumes. AM and PM peak hour traffic counts at the twenty-seven (27) key study intersections were collected by Counts Unlimited in November 2021. These counts were grown by 0.525% per year to establish existing baseline Year 2024 traffic volumes.

Figures 3-2 and ***3-3*** depict the existing AM and PM peak hour traffic volumes at the twenty-seven (27) key study intersections, respectively. ***Appendix A*** contains the detailed manual turning movement count sheets for the twenty-seven (27) key study intersections evaluated in this report.

3.3 Existing Public Transit

Torrance Transit operates Lines 1, 2, 3, 4X, 6, 7, 8, 9 and 10 within the study area. The Metro operates Line 344 within the study area. Gardena Transit operates Line 3 within the study area. Bus stops are generally provided along Hawthorne Boulevard, Madrona Avenue, and Carson Street within the vicinity of the Project site.

Torrance Transit Line 1:

- The route extends from Del Amo Fashion Center to Harbor Freeway Station.
- The route traverses the study area on Torrance Boulevard, Hawthorne Boulevard and Carson Street, with the closest bus stop located in the southeast corner of Madrona Avenue/Torrance Boulevard.
- During the AM and PM peak hours, headways are approximately one bus in each direction every hour.

Torrance Transit Line 2:

- The route extends from Del Amo Fashion Center to El Camino College.
- The route traverses the study area on Madrona Avenue, Carson Street, Torrance Boulevard, Anza Avenue, and Artesia Boulevard, with the closest bus stop located in the northeast corner of Madrona Avenue/Carson Street.
- During the AM and PM peak hours, headways are approximately one bus in each direction every hour.

Torrance Transit Line 3:

- The route extends from Redondo Beach Pier to Downtown Long Beach.

- The route traverses the study area on Carson Street, Hawthorne Boulevard and Torrance Boulevard, with the closest bus stop located in the northeast corner of Madrona Avenue/Carson Street.
- During the AM and PM peak hours, headways are approximately one bus in each direction every 30 minutes.

Torrance Transit Line Rapid 3:

- The route extends from Mary K. Giordano Transit Center to Downtown Long Beach.
- The route traverses the study area on Carson Street, Hawthorne Boulevard, and Torrance Boulevard with the closest bus stop located in the northwest corner of Del Amo Circle East/Carson Street.
- During the AM and PM peak hours, headways are approximately one bus in each direction every 30 minutes. No midday service is provided.

Torrance Transit Line 4X:

- The route extends from Hawthorne Boulevard/Pacific Coast Highway to Union Station in Los Angeles.
- The route traverses the study area on Hawthorne Boulevard and Torrance Boulevard, with the closest bus stop located in the southeast corner of Madrona Avenue/Torrance Boulevard.
- During the AM and PM peak hours, headways are approximately one bus in each direction every hour. No midday service is provided.

Torrance Transit Line 6:

- The route extends from Del Amo Fashion Center to Artesia Station.
- The route traverses the study area on Carson Street, Hawthorne Boulevard, Madrona Avenue, Prairie Avenue, and West 190th Street, with the closest bus stop located in the northeast corner of Madrona Avenue/Carson Street.
- During the AM and PM peak hours, headways are approximately one bus in each direction every hour.

Torrance Transit Line 7:

- The route extends from Redondo Beach Pier to Sepulveda Boulevard/Avalon Boulevard.
- The route traverses the study area on Sepulveda Boulevard, Madrona Avenue, Carson Street, and Hawthorne Boulevard, with the closest bus stop located in the southwest corner of Madrona Avenue/Carson Street.
- During the AM and PM peak hours, headways are approximately one bus in each direction every hour.

Torrance Transit Line 8:

- The route extends from Hawthorne Boulevard/Pacific Coast Highway to the LAX transit center.

- The route traverses the study area on Hawthorne Boulevard and Artesia Boulevard. The closest bus stop is located in the northeast corner of Hawthorne Boulevard/Carson Street.
- During the AM and PM peak hours, headways are approximately one bus in each direction every hour.

Torrance Transit Line 9:

- The route extends from Del Amo Mall to Sepulveda Boulevard/Avalon Boulevard.
- The route traverses the study area on Carson Street, Anza Avenue, Madrona Avenue, and Del Amo Circle East, with the closest bus stops located in the southwest corner of Madrona Avenue/Carson Street.
- During the AM and PM peak hours, headways are approximately one bus in each direction every hour.

Torrance Transit Line 10:

- The route extends from Crenshaw Boulevard/Pacific Coast Highway to Downtown Inglewood Station.
- The route traverses the study area on Crenshaw Boulevard with the closest bus stop located in the southwest corner of Crenshaw Boulevard/Carson Street.
- During the AM and PM peak hours, headways are approximately one bus in each direction every hour.

Metro Line 344:

- The route extends from the Harbor Gateway Transit Center to the Terranea Resort in Palos Verdes.
- The route traverses the study area on Hawthorne Boulevard, with the closest bus stop located in the southwest corner of Hawthorne Boulevard/Carson Street.
- During the AM and PM peak hours, headways are approximately one bus in each direction every 30 minutes.

Gardena Transit Line 3:

- The route extends from Alameda Street/Compton Boulevard to Torrance Boulevard/Prospect Avenue.
- The route traverses the study area on Hawthorne Boulevard and Torrance Boulevard, with the closest bus stop located in the northeast corner of Hawthorne Boulevard/Torrance Boulevard.
- During the AM and PM peak hours, headways are approximately one bus in each direction every 30 minutes.

3.4 Level of Service (LOS) Analysis Methodologies

AM and PM peak hour operating conditions for the key signalized study intersections were evaluated using the *Intersection Capacity Utilization (ICU) Methodology* for signalized intersections. Any unsignalized key study intersections were evaluated using the methodology outlined in the *Highway Capacity Manual (HCM)*.

3.4.1 *Intersection Capacity Utilization (ICU) Method of Analysis (Signalized Intersections)*

In conformance with City of Torrance requirements, existing AM and PM peak hour operating conditions for the key signalized study intersections were evaluated using the *Intersection Capacity Utilization (ICU)* method of analysis. The ICU technique is intended for signalized intersection analysis and estimates the volume to capacity (V/C) relationship for an intersection based on the individual V/C ratios for key conflicting traffic movements. The ICU numerical value represents the percent signal (green) time and thus capacity, required by existing and/or future traffic. It should be noted that the ICU methodology assumes uniform traffic distribution per intersection approach lane and optimal signal timing.

The ICU calculations use a lane capacity of 1,600 vehicles per hour (vph) for left-turn, through and right-turn lanes and dual left-turn capacity of 2,880 vph. A clearance adjustment factor of 0.10 was added to each Level of Service calculation.

The ICU value translates to a Level of Service (LOS) estimate, which is a relative measure of the intersection performance. The six qualitative categories of Level of Service have been defined along with the corresponding ICU value range and are shown in ***Table 3-1***. The ICU value is the sum of the critical volume-to-capacity ratios at an intersection; it is not intended to be indicative of the LOS of each of the individual turning movements.

3.4.2 *Highway Capacity Manual (HCM) Method of Analysis (Unsignalized Intersections)*

The HCM unsignalized methodology for stop-controlled intersections was utilized for the analysis of the unsignalized intersections. This methodology estimates the average control delay for each of the subject movements and determines the level of service for each movement. For all-way stop controlled intersections, the overall average control delay measured in seconds per vehicle, and level of service is then calculated for the entire intersection. For one-way and two-way stop-controlled (minor street stop-controlled) intersections, this methodology estimates the worst side street delay, measured in seconds per vehicle and determines the level of service for that approach. The HCM control delay value translates to a Level of Service (LOS) estimate, which is a relative measure of the intersection performance. The six qualitative categories of Level of Service have been defined along with the corresponding HCM control delay value range, as shown in ***Table 3-2.***

3.5 Level of Service Criteria and Thresholds

The need for potential Project-related improvements due to the added Project traffic volumes generated by the proposed Project during the AM and PM peak hours was evaluated based on analysis of future operating conditions at the key study intersections, without, then with, the proposed Project using the *Intersection Capacity Utilization (ICU) Methodology* and the *Highway*

Capacity Manual (HCM) Methodology. The previously discussed capacity analysis procedures were utilized to investigate the future volume-to-capacity relationships, delay and service level characteristics at each key study intersection. Each key study intersection was then evaluated using the following LOS criteria. It is noted that according to the City of Torrance, LOS D or better is the City's target for intersection operation. The LOS D objective for the roadway network reflects the City's desire to maintain a minimum acceptable condition during the morning and evening peak commute hours on all intersections within the City.

3.5.1 *Signalized Intersections Criteria*

- For signalized intersections, Project-related improvements are needed if the project related increase in the volume to capacity (V/C) ratio equals or exceeds the threshold shown below:

Level of Service (LOS)	Project-Related V/C Increase
C	0.04 or more
D	0.02 or more
E/F	0.01 or more

Source: *City of Torrance Traffic Circulation Analysis (TCA) Guidelines*

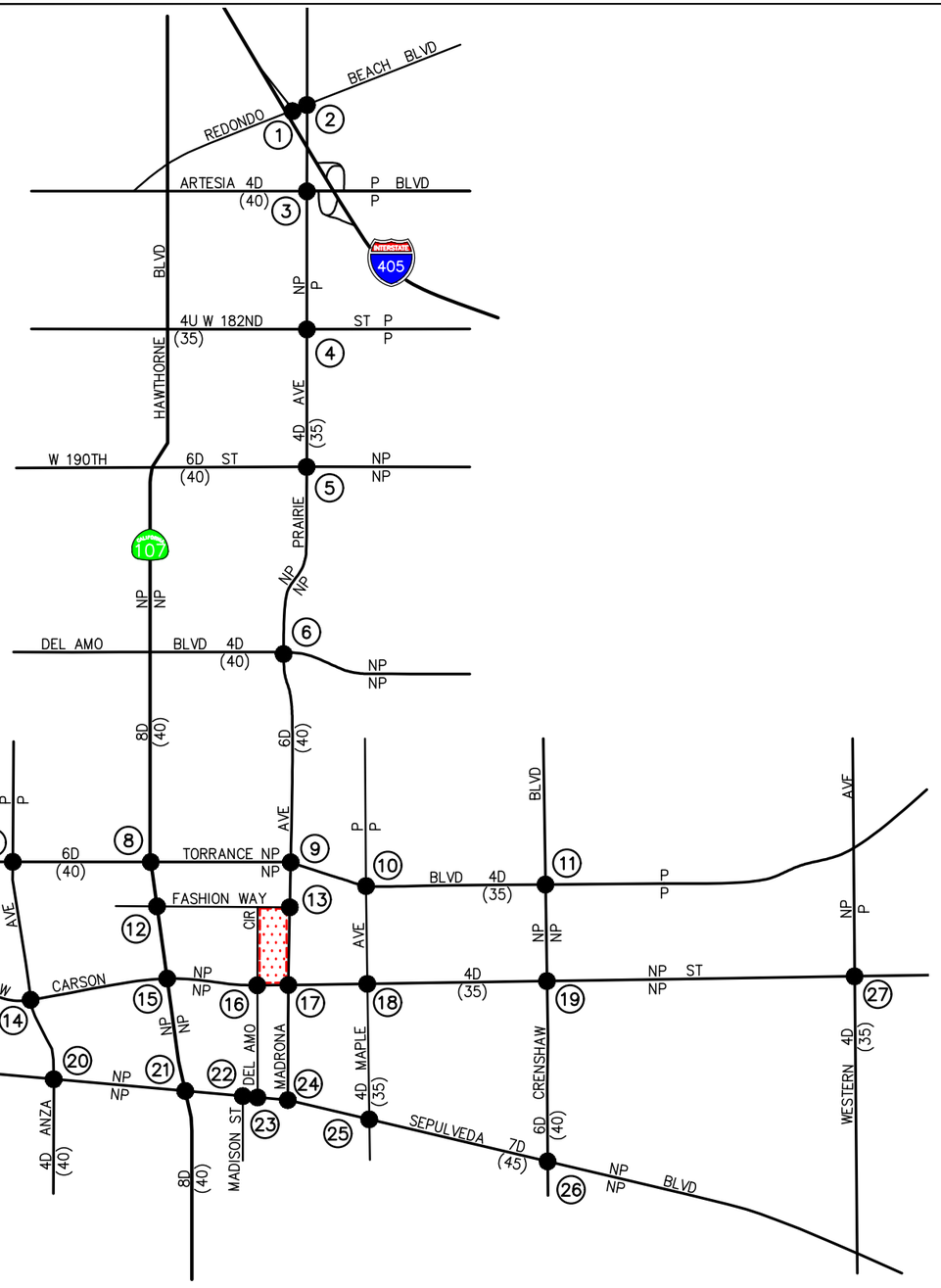
As indicated above, the Project-related increase in ICU value that defines whether Project-related improvements are needed varies with LOS. At LOS C or LOS D, the threshold is an increase of 0.04 or greater or 0.02 or greater, respectively, in the ICU value. This is reduced to 0.01 or greater under LOS E and F.

3.5.2 *Unsignalized Intersections Criteria*

- For unsignalized intersections, Project-related improvements are needed if the project causes an intersection at LOS D or better to degrade to LOS E or F.

However, unsignalized intersection LOS is based on the control delay, but delay is only assessed for those traffic movements that are stopped or must yield to through traffic. Some movements, including cross traffic on the minor street or left turns onto the major street are acceptable with long delays, provided through traffic and right turns from a major street do not experience any delays at stopped intersections. When delay for cross traffic is severe (LOS F), the intersection should be further evaluated for possible improvement with traffic signals. In some cases, this analysis determines that the delay is being experienced by a very low number of vehicles and traffic signals are not warranted. For this condition, the intersection does not satisfy the need for Project-related improvements, but measures to reduce delay may be considered, if appropriate. In other cases, the number of stopped vehicles is substantial and traffic signals may be justified as a circulation enhancement. Therefore, the following significance criteria for unsignalized intersections are used:

An unsignalized intersection requires Project-related improvements if the project causes an intersection at LOS D or better to degrade to LOS E or F, and the traffic signal warrant analysis determines that a signal is justified.



1 UNSIGNALIZED
I-405 NB ON-RAMP @ REDONDO BEACH BLVD

2 8 PHASE SIGNAL
PRAIRIE AVE @ REDONDO BEACH BLVD

3 OL 8 PHASE SIGNAL
PRAIRIE AVE @ ARTESIA BLVD

4 OL OL 8 PHASE SIGNAL
PRAIRIE AVE @ W 182ND ST

5 OL 8 PHASE SIGNAL
PRAIRIE AVE @ W 190TH ST

6 8 PHASE SIGNAL
MADRONA AVE @ DEL AMO BLVD

7 8 PHASE SIGNAL
ANZA AVE @ TORRANCE BLVD

8 8 PHASE SIGNAL
HAWTHORNE BLVD @ TORRANCE BLVD

9 8 PHASE SIGNAL
MADRONA AVE @ TORRANCE BLVD

10 5 PHASE SIGNAL
MAPLE AVE @ TORRANCE BLVD

11 8 PHASE SIGNAL
CRENSHAW BLVD @ TORRANCE BLVD

12 OL OL 6 PHASE SIGNAL E/W SPLIT
HAWTHORNE BVLD @ FASHION WY

13 OL 5 PHASE SIGNAL
MADRONA AVE @ FASHION WY

14 8 PHASE SIGNAL
ANZA AVE @ W CARSON ST

15 8 PHASE SIGNAL
HAWTHORNE BLVD @ W CARSON ST

16 2 PHASE SIGNAL
DEL AMO CIR E @ W CARSON ST

17 8 PHASE SIGNAL
MADRONA AVE @ W CARSON ST

18 2 PHASE SIGNAL
MAPLE AVE @ W CARSON ST

19 8 PHASE SIGNAL
CRENSHAW BLVD @ W CARSON ST

20 8 PHASE SIGNAL
ANZA AVE @ SEPULVEDA BLVD

21 8 PHASE SIGNAL
HAWTHORNE BLVD @ SEPULVEDA BLVD

22 3 PHASE SIGNAL
MADISON ST @ SEPULVEDA BLVD

23 OL 3 PHASE SIGNAL
DEL AMO CIR E @ SEPULVEDA BLVD

24 OL OL 3 PHASE SIGNAL
MADRONA AVE @ SEPULVEDA BLVD

25 8 PHASE SIGNAL
MAPLE AVE @ SEPULVEDA BLVD

26 OL 8 PHASE SIGNAL
CRENSHAW BLVD @ SEPULVEDA BLVD

27 5 PHASE SIGNAL
WESTERN AVE @ CARSON ST

n:\4300\2204363 - lennar del amo, torrance\dwg\4363 f3-1.dwg LDP 08:38:02 03-12-2024 aguilar

LLG

N NO SCALE

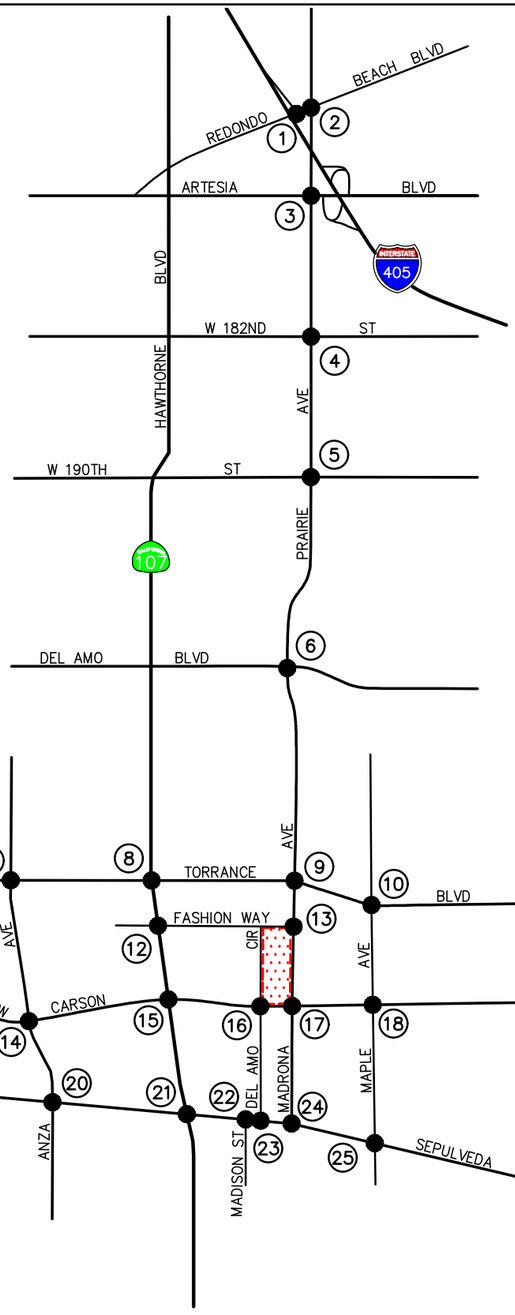
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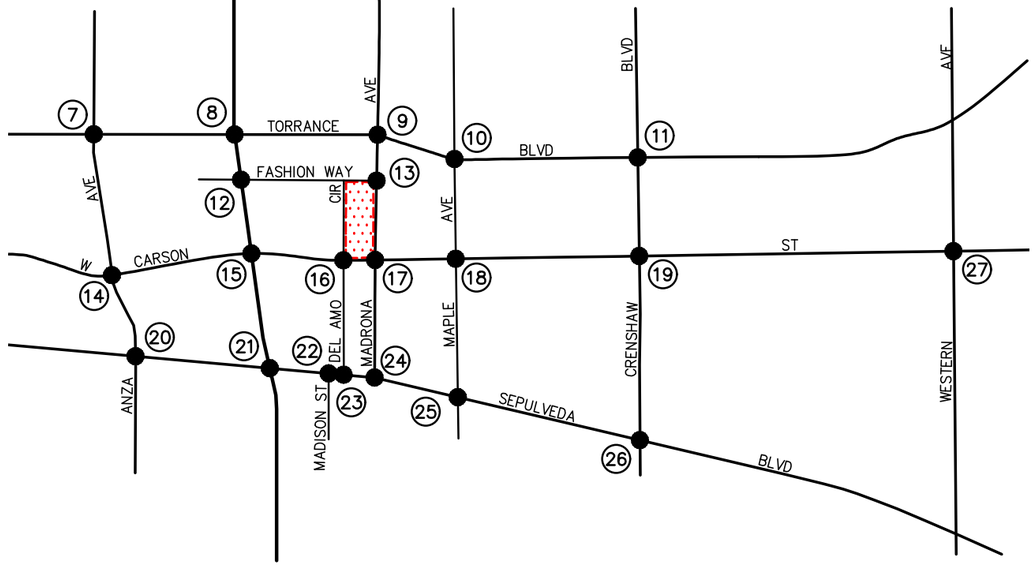
(#) = STUDY INTERSECTION
← = APPROACH LANE ASSIGNMENT
● = TRAFFIC SIGNAL, ⊤ = STOP SIGN
P = PARKING, NP = NO PARKING
U = UNDIVIDED, D = DIVIDED
2 = NUMBER OF TRAVEL LANES
(XX)= POSTED SPEED LIMIT (MPH)
OL = OVERLAP
▭ = PROJECT SITE

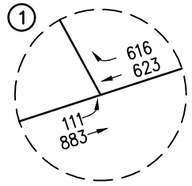
FIGURE 3-1

EXISTING ROADWAY CONDITIONS AND INTERSECTION CONTROLS

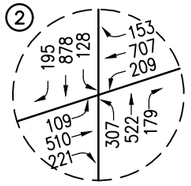
LENNAR DEL AMO, TORRANCE



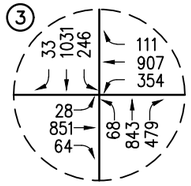




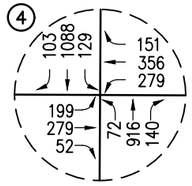
1 I-405 NB ON-RAMP @ REDONDO BEACH BLVD



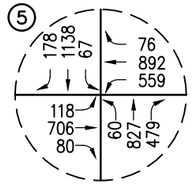
2 PRAIRIE AVE @ REDONDO BEACH BLVD



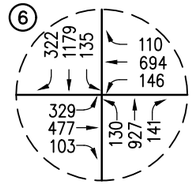
3 PRAIRIE AVE @ ARTESIA BLVD



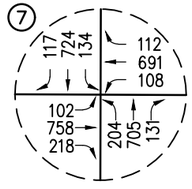
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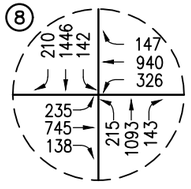
5 PRAIRIE AVE @ W 190TH ST



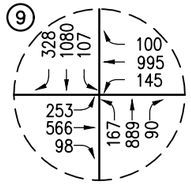
6 MADRONA AVE @ DEL AMO BLVD



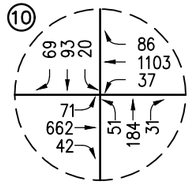
7 ANZA AVE @ TORRANCE BLVD



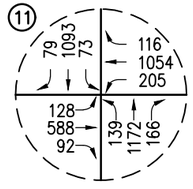
8 HAWTHORNE BLVD @ TORRANCE BLVD



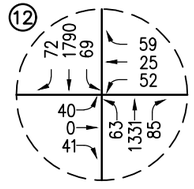
9 MADRONA AVE @ TORRANCE BLVD



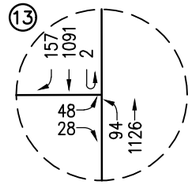
10 MAPLE AVE @ TORRANCE BLVD



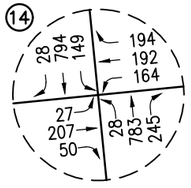
11 CRENSHAW BLVD @ TORRANCE BLVD



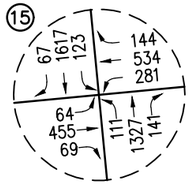
12 HAWTHORNE BVLD @ FASHION WY



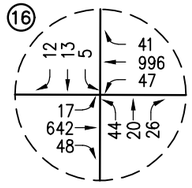
13 MADRONA AVE @ FASHION WY



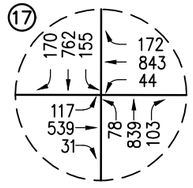
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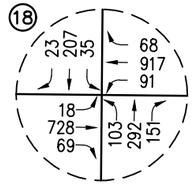
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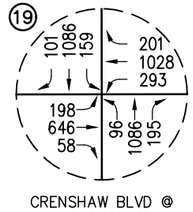
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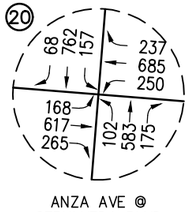
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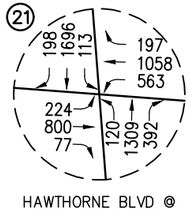
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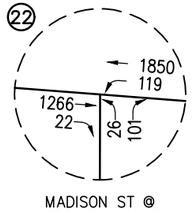
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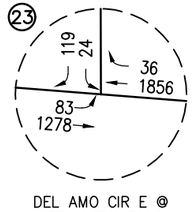
20 ANZA AVE @ SEPULVEDA BLVD



21 HAWTHORNE BLVD @ SEPULVEDA BLVD



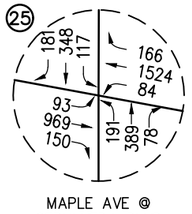
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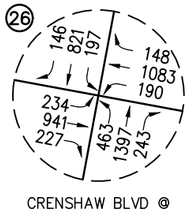
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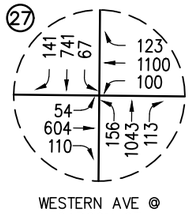
24 MADRONA AVE @ SEPULVEDA BLVD



25 MAPLE AVE @ SEPULVEDA BLVD



26 CRENSHAW BLVD @ SEPULVEDA BLVD



27 WESTERN AVE @ CARSON ST

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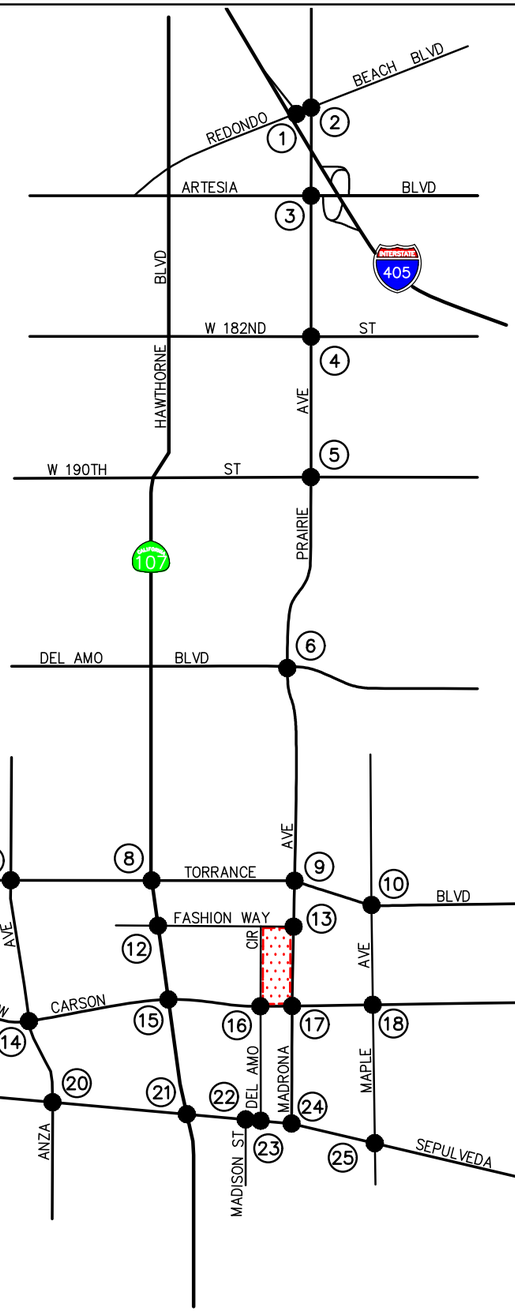
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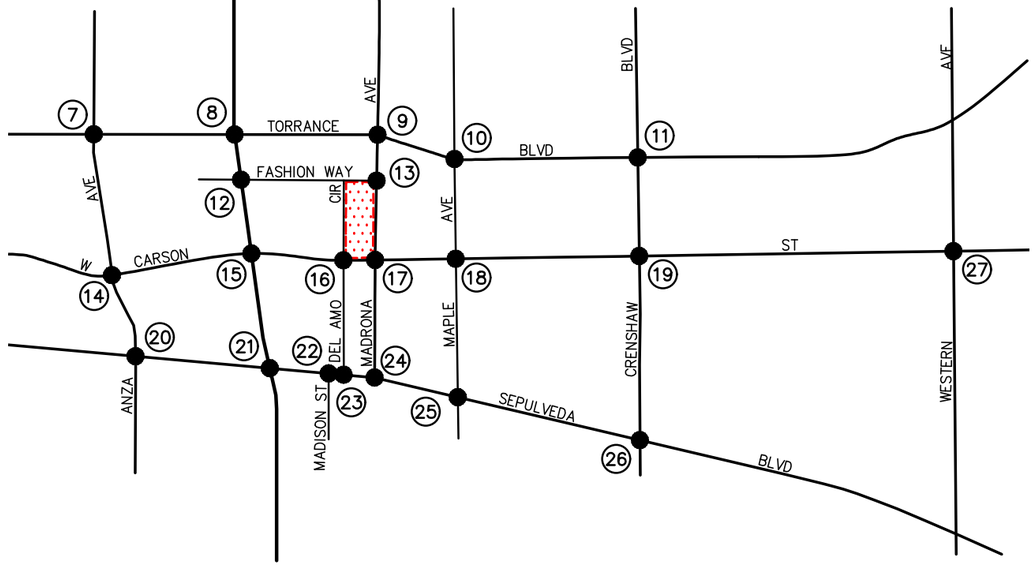
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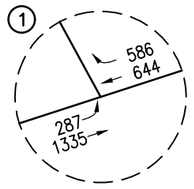
FIGURE 3-2

EXISTING AM PEAK HOUR TRAFFIC VOLUMES

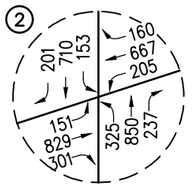
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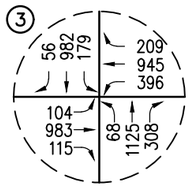




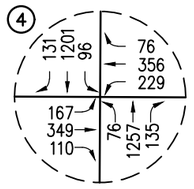
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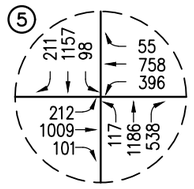
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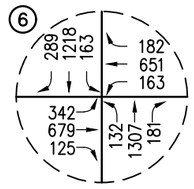
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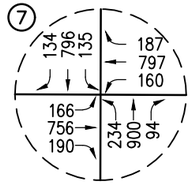
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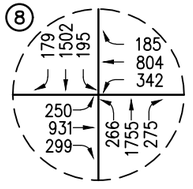
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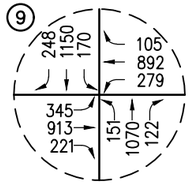
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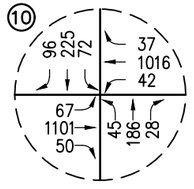
7 ANZA AVE @ TORRANCE BLVD



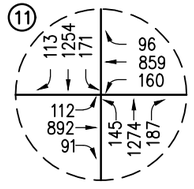
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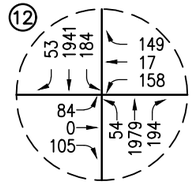
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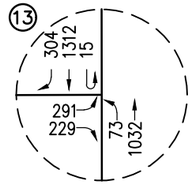
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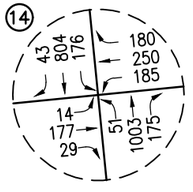
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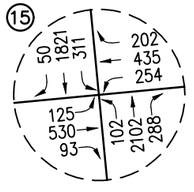
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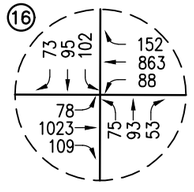
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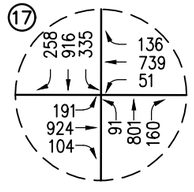
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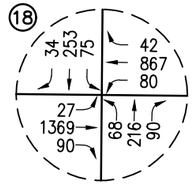
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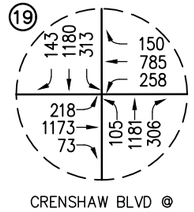
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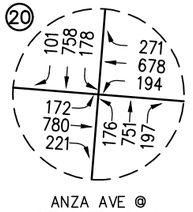
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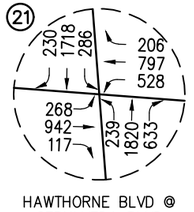
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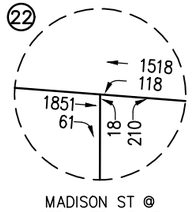
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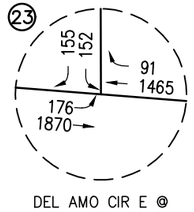
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21 HAWTHORNE BLVD @ SEPULVEDA BLVD



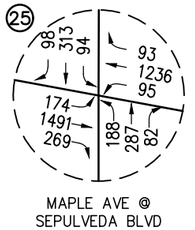
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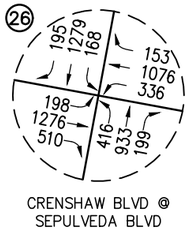
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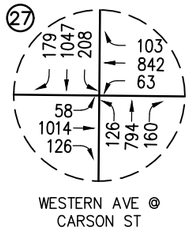
24 MADRONA AVE @ SEPULVEDA BLVD



25 MAPLE AVE @ SEPULVEDA BLVD



26 CRENSHAW BLVD @ SEPULVEDA BLVD



27 WESTERN AVE @ CARSON ST

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KEY

(#) = STUDY INTERSECTION

= PROJECT SITE

FIGURE 3-3

EXISTING PM PEAK HOUR TRAFFIC VOLUMES

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TABLE 3-1

LEVEL OF SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS (ICU METHODOLOGY)[1]

Level of Service (LOS)	Intersection Capacity Utilization Value (ICU)	Level of Service Description
A	≤ 0.600	**EXCELLENT**. No vehicle waits longer than one red light and no approach phase is fully used.
B	0.601 – 0.700	**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	**GOOD**. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	0.801 – 0.900	**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	**POOR**. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	> 1.000	**FAILURE**. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Potentially very long delays with continuously increasing queue lengths.

[1] Source: *Transportation Research Board Circular 212 - Interim Materials on Highway Capacity.*

TABLE 3-2

LEVEL OF SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS (HCM METHODOLOGY)[2]

Level of Service (LOS)	Highway Capacity Manual Delay Value (sec/veh)	Level of Service Description
A	≤ 10.0	Little or no delay
B	> 10.0 and ≤ 15.0	Short traffic delays
C	> 15.0 and ≤ 25.0	Average traffic delays
D	> 25.0 and ≤ 35.0	Long traffic delays
E	> 35.0 and ≤ 50.0	Very long traffic delays
F	> 50.0	Severe congestion

[2] Source: *Highway Capacity Manual*, (Unsignalized Intersections).

4.0 TRAFFIC FORECASTING METHODOLOGY

In order to estimate the traffic impact characteristics of the Project, a multi-step process has been utilized. The first step is traffic generation, which estimates the total arriving and departing traffic on a peak hour and daily basis. The traffic generation potential is forecast by applying the appropriate vehicle trip generation equations and/or rates to the Project development tabulation.

The second step of the forecasting process is traffic distribution, which identifies the origins and destinations of inbound and outbound Project traffic. These origins and destinations are typically based on demographics and existing/expected future travel patterns in the study area.

The third step is traffic assignment, which involves the allocation of Project traffic to study area streets and intersections. Traffic assignment is typically based on minimization of travel time, which may or may not involve the shortest route, depending on prevailing operating conditions and travel speeds. Traffic distribution patterns are indicated by general percentage orientation, while traffic assignment allocates specific volume forecasts to individual roadway segments and intersection turning movements throughout the study area.

With the forecasting process complete and Project traffic assignments developed, the impact of the Project is isolated by comparing operational (LOS) conditions at selected key intersections using expected future traffic volumes with and without forecast Project traffic. If necessary, the need for site-specific and/or cumulative local area traffic improvements can then be evaluated.

5.0 PROJECT TRAFFIC CHARACTERISTICS

5.1 Project Trip Generation Forecast

Traffic generation is expressed in vehicle trip ends, defined as one-way vehicular movements, either entering or exiting the generating land use. Generation factors and equations used in this analysis are based on information found in the 11th Edition of *Trip Generation,* published by the Institute of Transportation Engineers (ITE) [Washington, D.C., 2021].

Table 5-1 presents the trip generation forecast for the Project. The upper portion of *Table 5-1* summarizes the trip generation rates used in forecasting the vehicular trips generated by the proposed Project. As shown**,** ITE Land Use Code 221: Multifamily Housing Mid Rise Not Close to Rail Transit average trip rates were used.

It should be noted that although both the existing Neoteryx office/laboratory building and Black Angus Steakhouse are currently operational, both land uses currently generates a nominal number of trips. As such, trip credit for both of the existing land uses will not be applied to provide a conservative assessment.

A review of the lower portion of this table indicates that the proposed Project is forecast to generate 1,013 daily trips, with 99 trips (22 inbound, 77 outbound) produced in the AM peak hour, and 87 trips (53 inbound, 34 outbound) produced in the PM peak hour on a weekday.

Please note that due to close proximity to Del Amo Fashion Center, the aforementioned trip generation of the proposed project includes adjustments for “internal capture”.

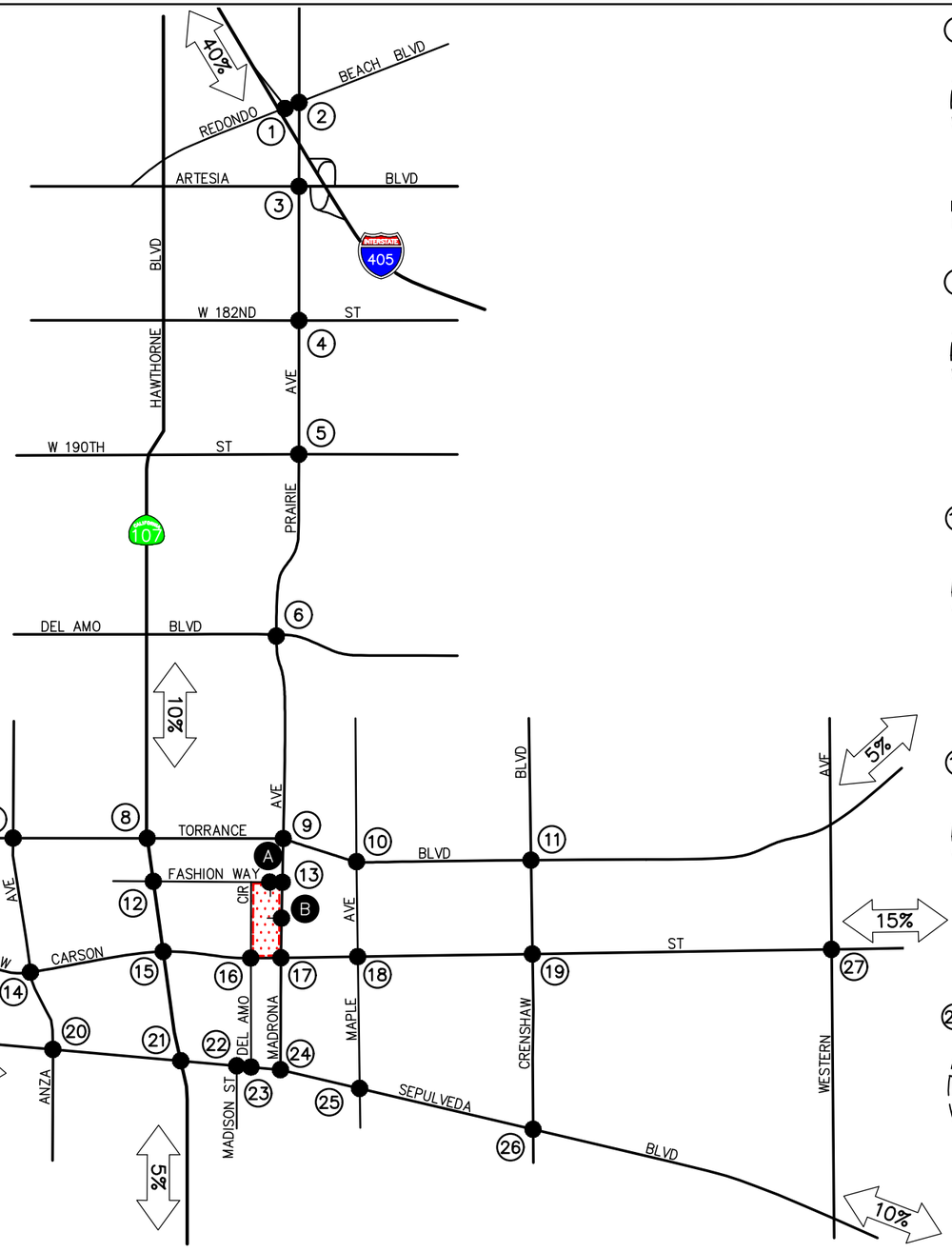
As indicated earlier, the most recent site plan prepared by KTGY Architecture + Planning indicates a reduced project description from what was reported in the March 14, 2024 Local Circulation Analysis. Although the Project now includes construction of a 260 multifamily residential DU community, this revised traffic assessment conservatively evaluates the potential impact of 272 dwelling units.

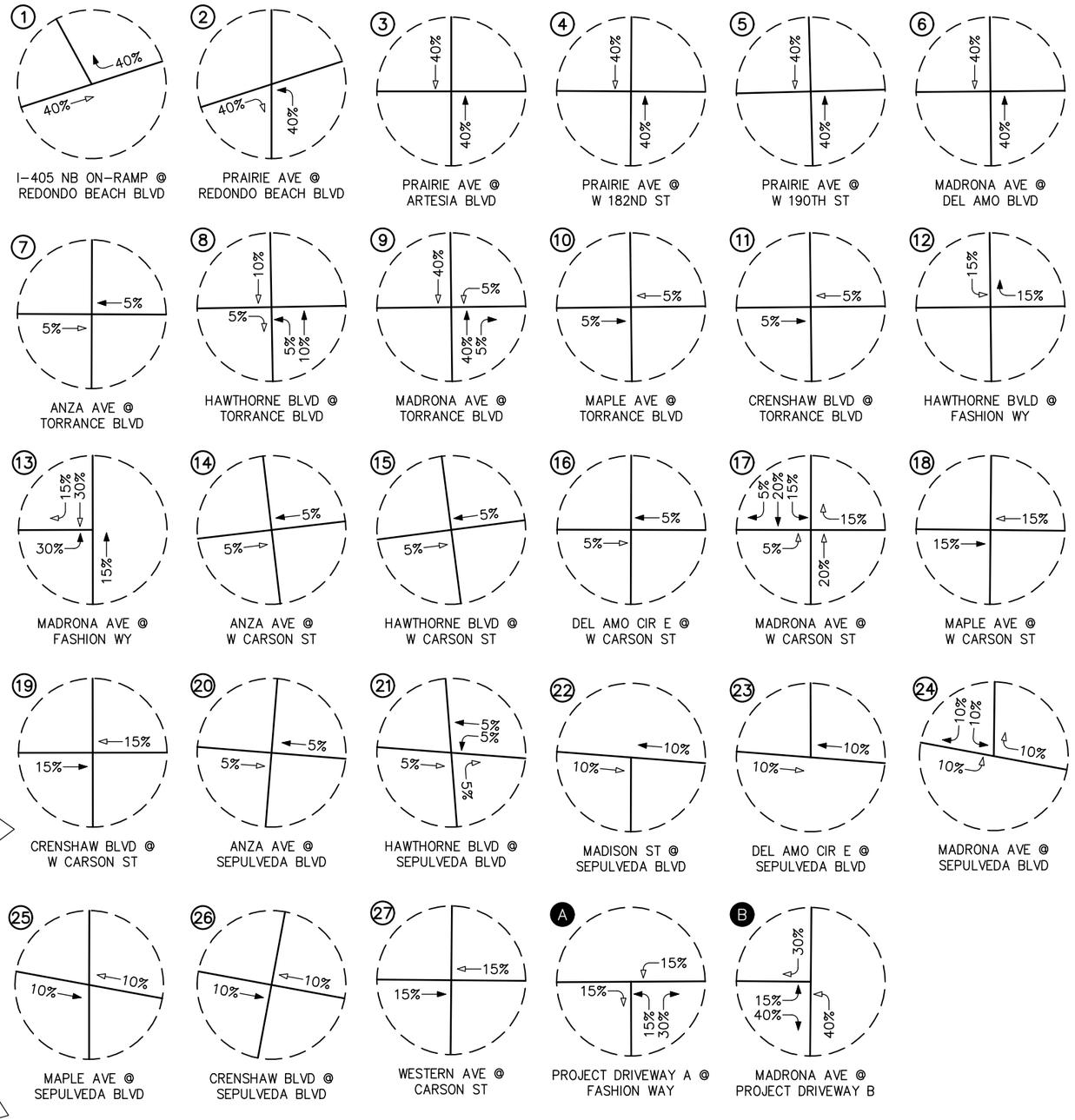
5.2 Project Trip Distribution and Assignment

The directional traffic distribution pattern for the proposed Project at the twenty-seven (27) study intersections and two (2) project driveways are graphically presented in ***Figure 5-1***. Project traffic volumes both entering and exiting the site have been distributed and assigned to the adjacent street system based on the following considerations:

- Location of site access points in relation to the surrounding street system,
- the site's proximity to major traffic carriers and regional access routes,
- physical characteristics of the circulation system such as lane channelization and presence of traffic signals that affect travel patterns, and peak hour turn restrictions,
- presence of traffic congestion in the surrounding vicinity,
- location of the Project within the Del Amo Fashion Center Mall property,
- ingress/egress availability at the Project site, and
- input from City staff.

The anticipated AM and PM peak hour Project volumes associated with the proposed Project at the twenty-seven (27) study intersections and two (2) project driveways are presented in ***Figures 5-2*** and ***5-3,*** respectively. The traffic volume assignments presented in *Figures 5-2* and *5-3* reflect the traffic distribution characteristics shown in *Figure 5-1* and the traffic generation forecast presented in *Table 5-1*.





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= INBOUND PERCENTAGE

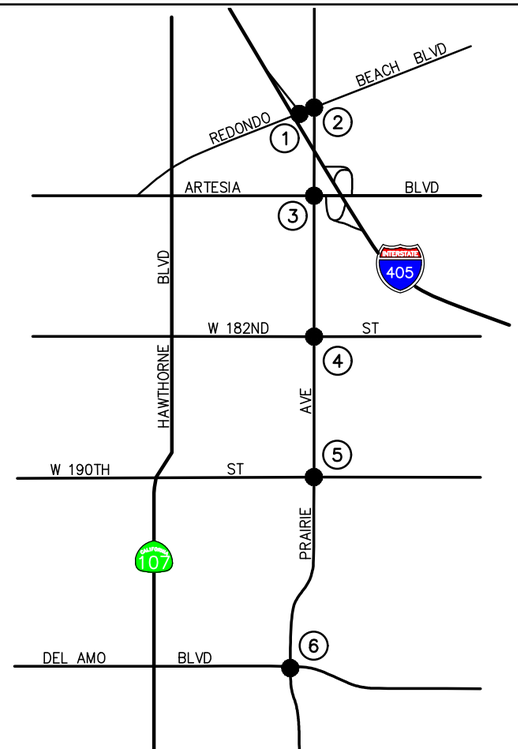
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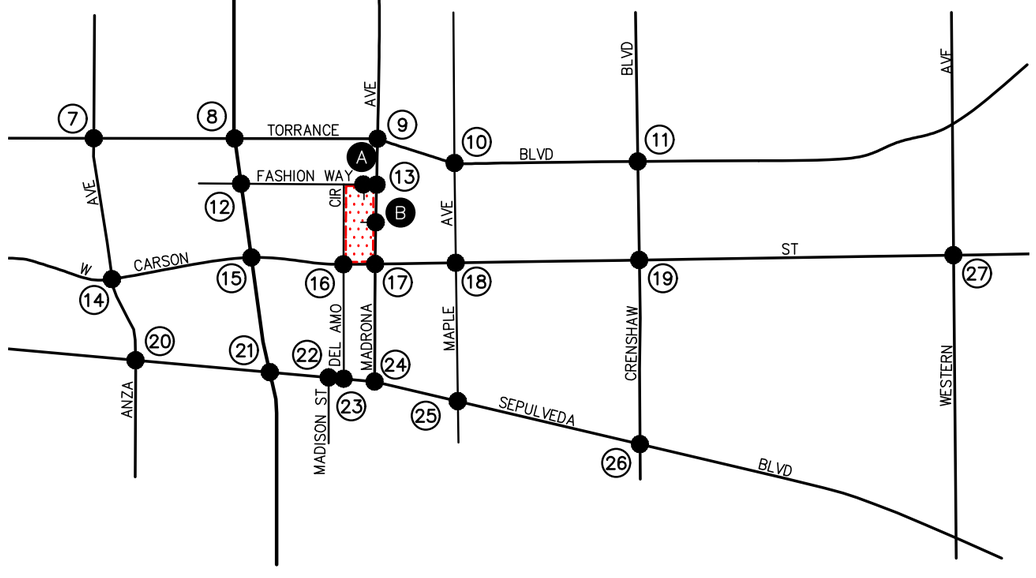
= PROJECT SITE

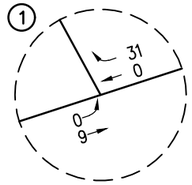
FIGURE 5-1

PROJECT TRIP DISTRIBUTION PATTERN

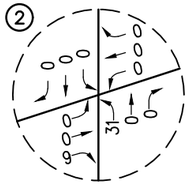
LENNAR DEL AMO, TORRANCE



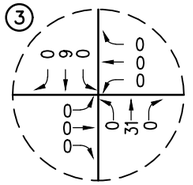




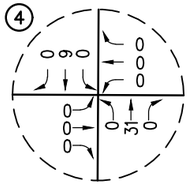
1 I-405 NB ON-RAMP @ REDONDO BEACH BLVD



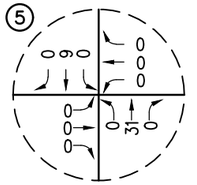
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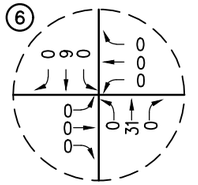
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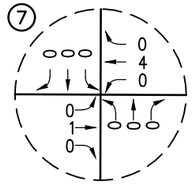
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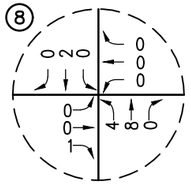
5 PRAIRIE AVE @ W 190TH ST



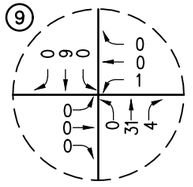
6 MADRONA AVE @ DEL AMO BLVD



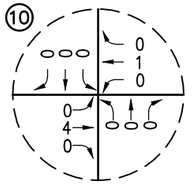
7 ANZA AVE @ TORRANCE BLVD



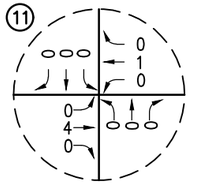
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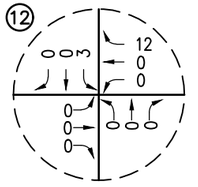
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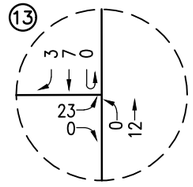
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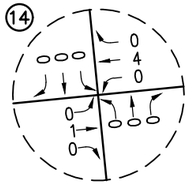
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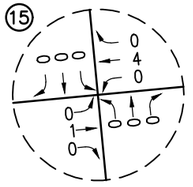
12 HAWTHORNE BVLD @ FASHION WY



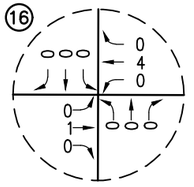
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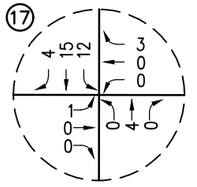
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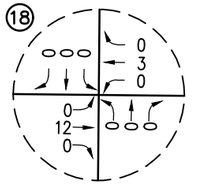
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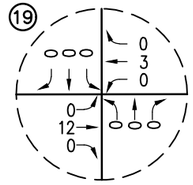
16 DEL AMO CIR E @ W CARSON ST



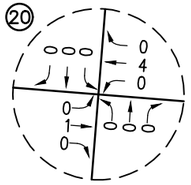
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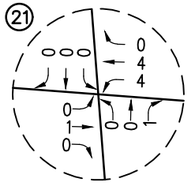
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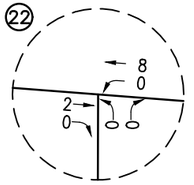
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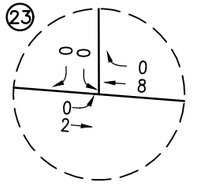
20 ANZA AVE @ SEPULVEDA BLVD



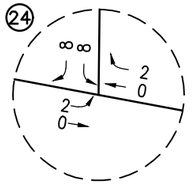
21 HAWTHORNE BLVD @ SEPULVEDA BLVD



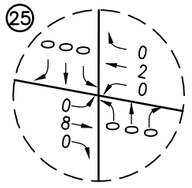
22 MADISON ST @ SEPULVEDA BLVD



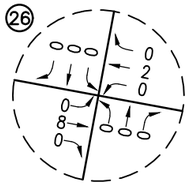
23 DEL AMO CIR E @ SEPULVEDA BLVD



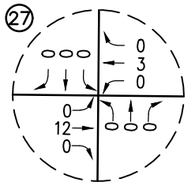
24 MADRONA AVE @ SEPULVEDA BLVD



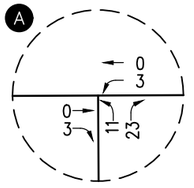
25 MAPLE AVE @ SEPULVEDA BLVD



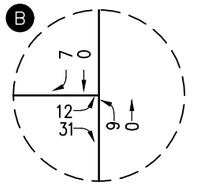
26 CRENSHAW BLVD @ SEPULVEDA BLVD



27 WESTERN AVE @ CARSON ST



A PROJECT DRIVEWAY A @ FASHION WAY



B MADRONA AVE @ PROJECT DRIVEWAY B

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KEY

(#) = STUDY INTERSECTION

= PROJECT SITE

LLG

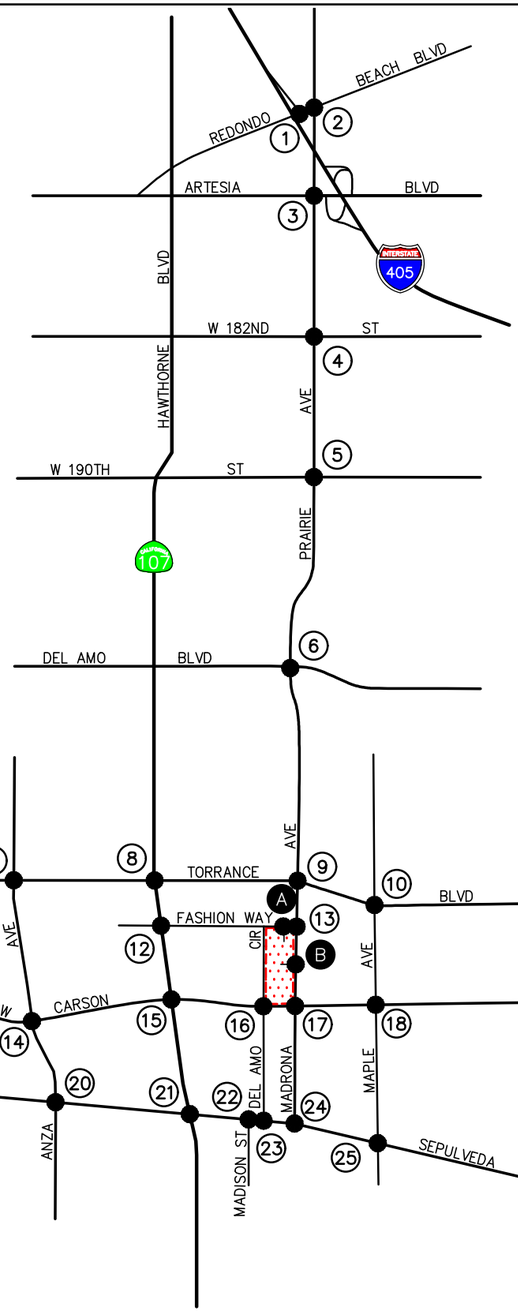
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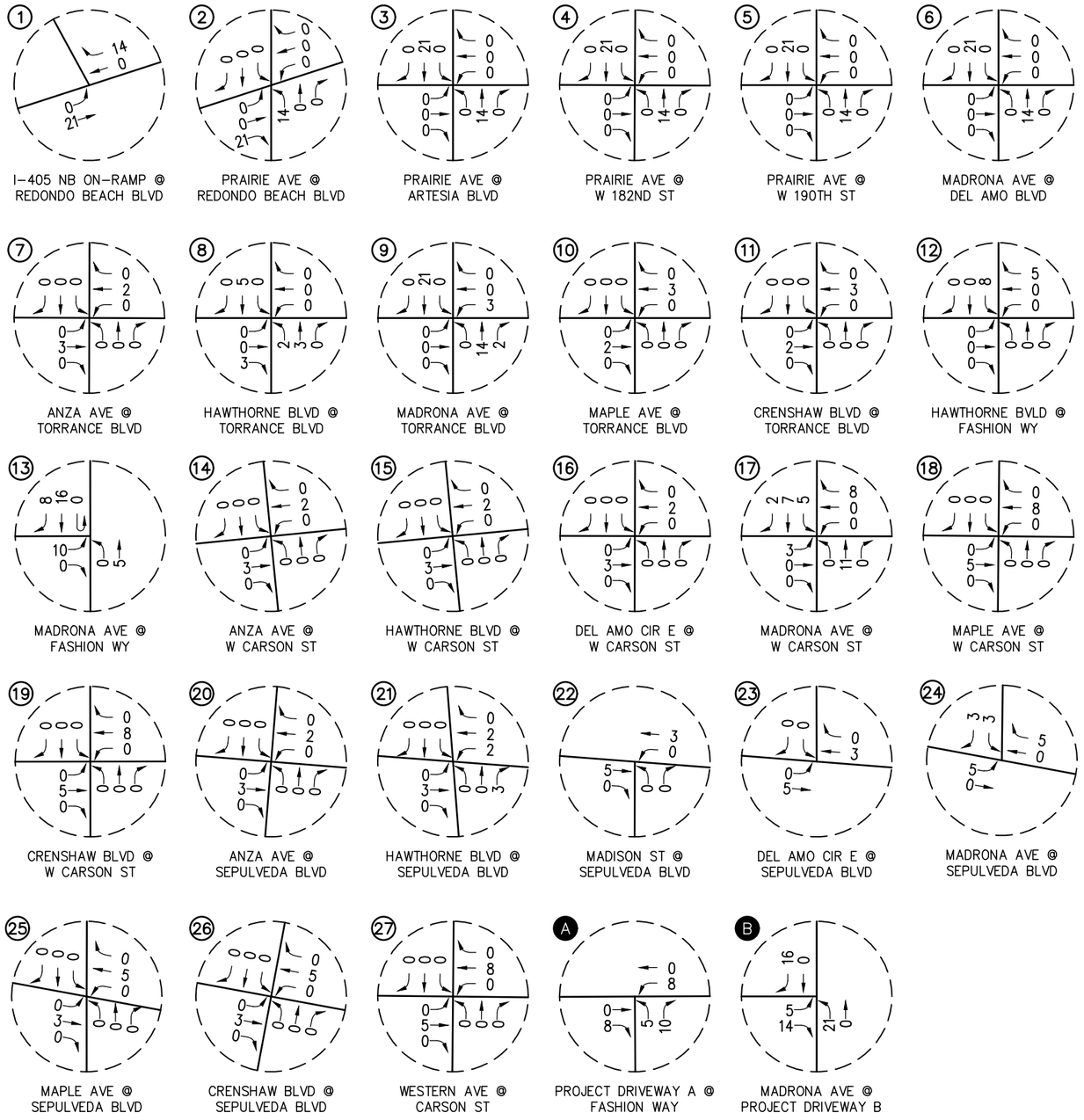
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FIGURE 5-2

AM PEAK HOUR PROJECT TRAFFIC VOLUMES

LENNAR DEL AMO, TORRANCE





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KEY

(#) = STUDY INTERSECTION

= PROJECT SITE

FIGURE 5-3

PM PEAK HOUR PROJECT TRAFFIC VOLUMES

LENNAR DEL AMO, TORRANCE

TABLE 5-1

PROJECT TRAFFIC GENERATION RATES AND FORECAST[3]

Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
Proposed Trip Generation Rates:							
▪ ITE 221: Multifamily Housing Mid Rise Not Close to Rail Transit (TE/DU)	4.54	23%	77%	0.37	61%	39%	0.39
Proposed Trip Generation Forecast:							
▪ Multifamily Housing Mid Rise (272 DU)	1,235	23	78	101	65	41	106
Internal Capture Reduction (Daily: 18%, AM 2%, PM 18%)[4]	*-222*	*-1*	*-1*	*-2*	*-12*	*-7*	*-19*
Total Proposed Project Trip Generation	**1,013**	**22**	**77**	**99**	**53**	**34**	**87**

[3] Source: *Trip Generation*, 11th Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2021).

[4] Based on review of the internal capture worksheets which are consistent with the *Trip Generation Handbook, 3rd Edition,* published by ITE (August 2014) along with discussions with City staff, the following internal capture reductions were conservatively applied: 18.0% Daily, 2.0% AM peak hour, and 18.0% PM peak hour. The internal capture takes into account the interaction between the existing Del Amo Fashion Center and the proposed Project.

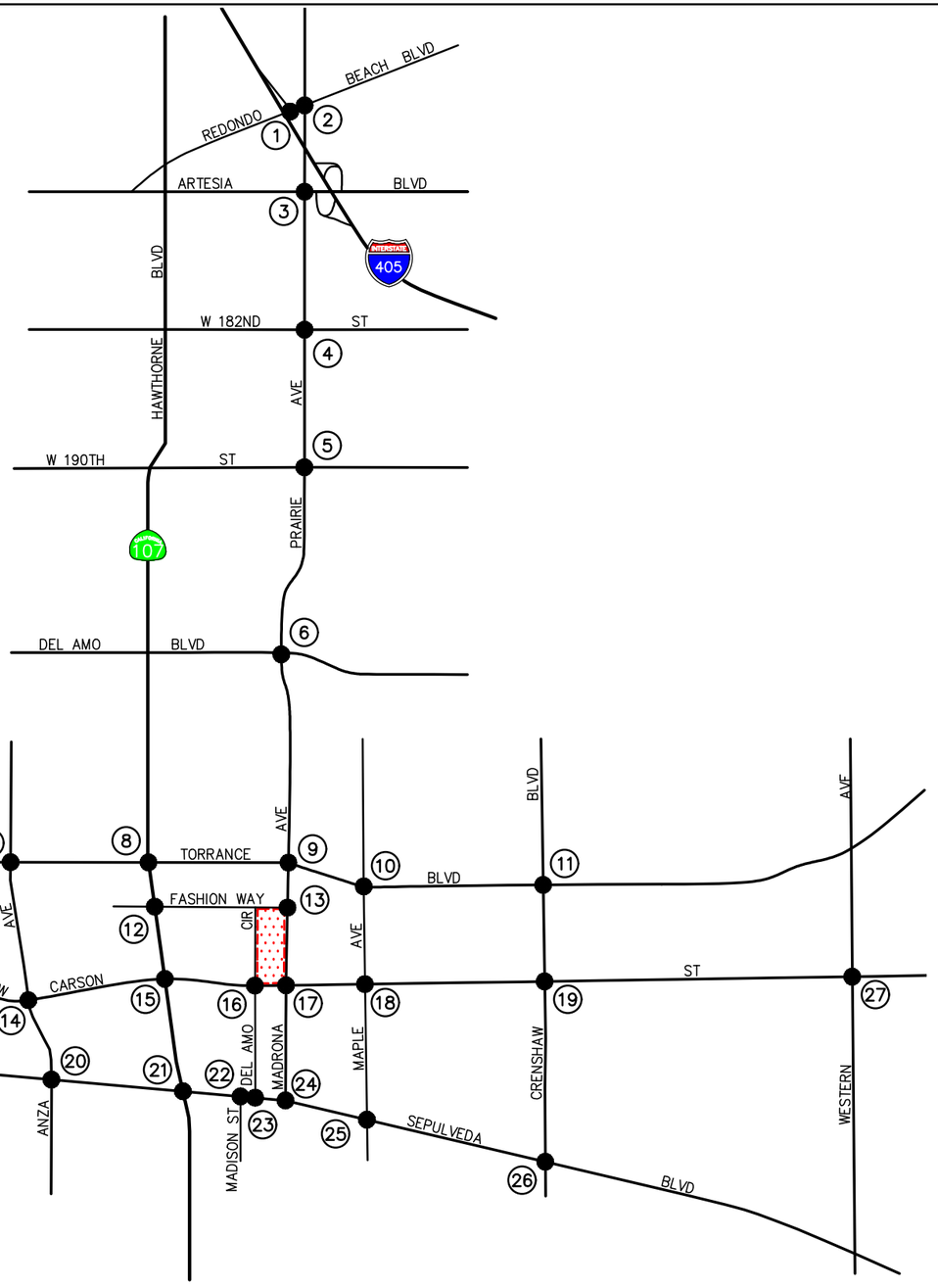
6.0 FUTURE TRAFFIC CONDITIONS

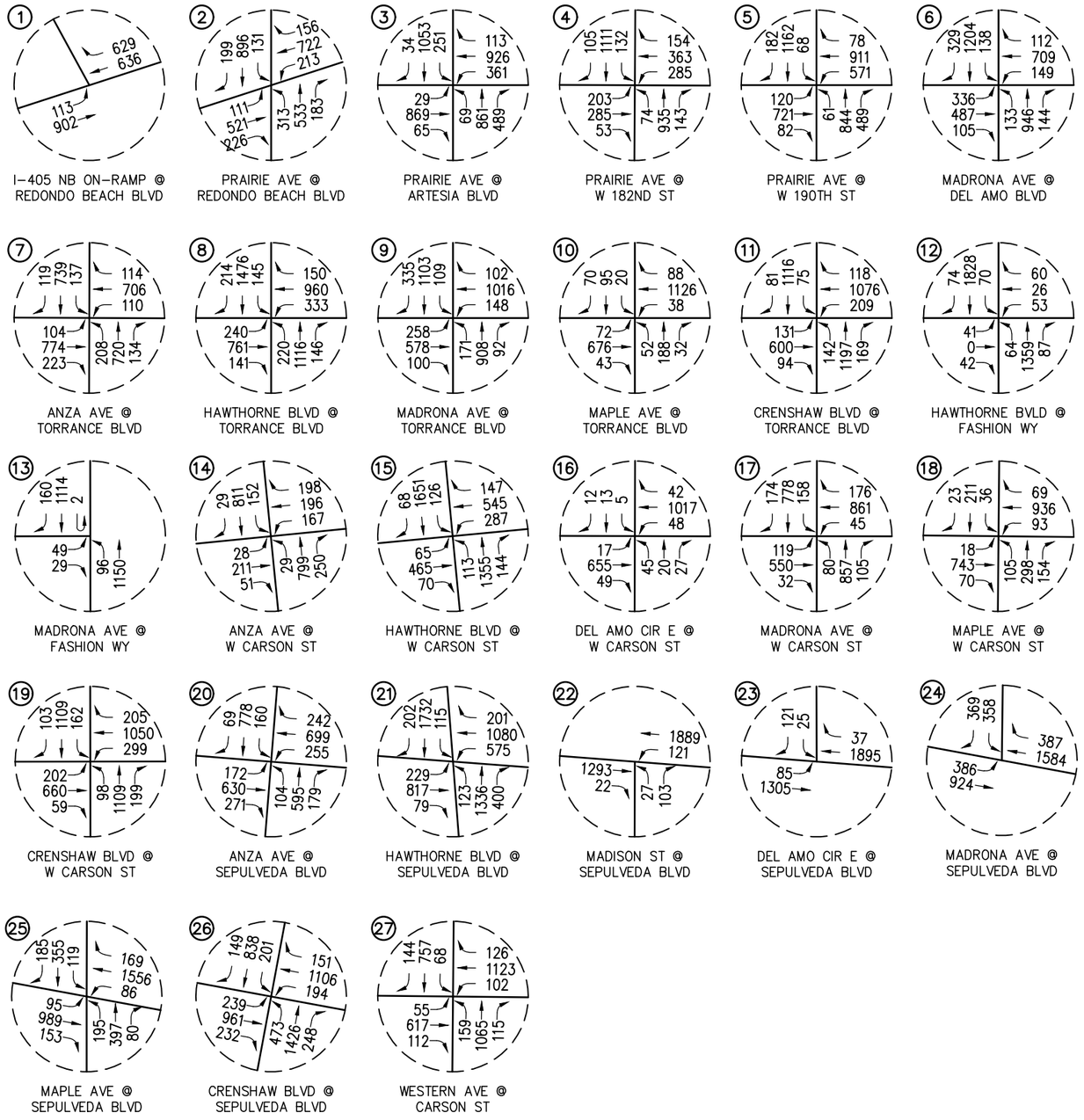
6.1 Ambient Traffic Growth

For future traffic conditions, background traffic growth estimates have been calculated using an ambient growth factor. The ambient growth factor is intended to include unknown and future cumulative projects in the study area, as well as account for regular growth in traffic volumes due to the development of projects outside the study area. An annual growth rate of 0.525 percent was applied to baseline Year 2024 traffic volumes at the key study intersections to develop horizon Year 2028 traffic volumes.

6.2 Year 2028 Traffic Volumes

Figures 6-1 and ***6-2*** present the AM and PM peak hour Existing with Ambient Growth to the Year 2028 traffic volumes at the twenty-seven (27) key study intersections, respectively. ***Figures 6-3*** and ***6-4*** present the AM and PM peak hour Existing with Ambient Growth to the Year 2028 with Project traffic volumes at the twenty-seven (27) key study intersections, respectively.





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N NO SCALE

KEY

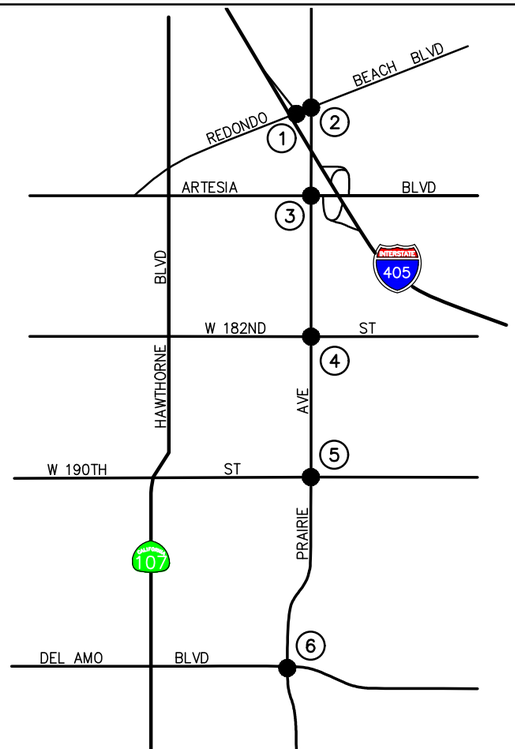
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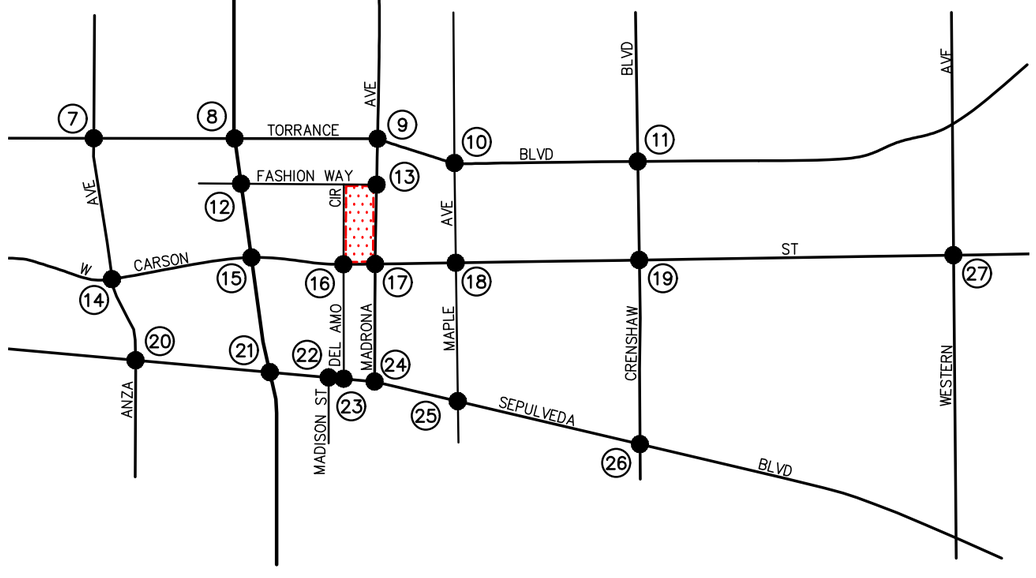
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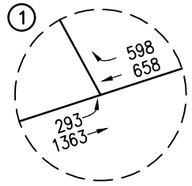
FIGURE 6-1

EXISTING WITH AMBIENT GROWTH (YEAR 2028) AM PEAK HOUR TRAFFIC VOLUMES

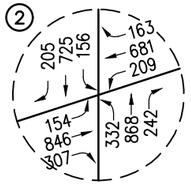
LENNAR DEL AMO, TORRANCE



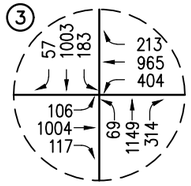




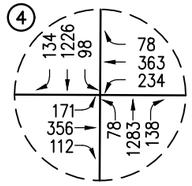
1 I-405 NB ON-RAMP @ REDONDO BEACH BLVD



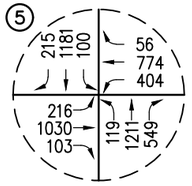
2 PRAIRIE AVE @ REDONDO BEACH BLVD



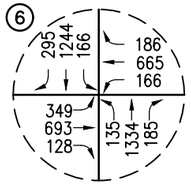
3 PRAIRIE AVE @ ARTESIA BLVD



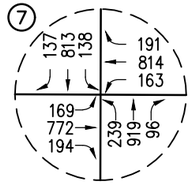
4 PRAIRIE AVE @ W 182ND ST



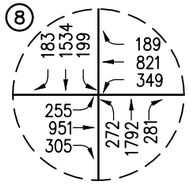
5 PRAIRIE AVE @ W 190TH ST



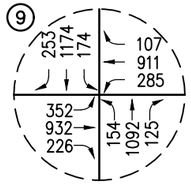
6 MADRONA AVE @ DEL AMO BLVD



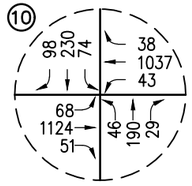
7 ANZA AVE @ TORRANCE BLVD



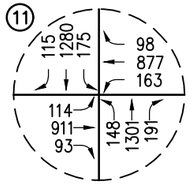
8 HAWTHORNE BLVD @ TORRANCE BLVD



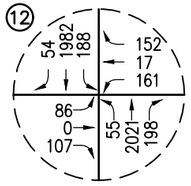
9 MADRONA AVE @ TORRANCE BLVD



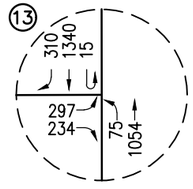
10 MAPLE AVE @ TORRANCE BLVD



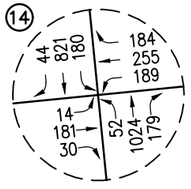
11 CRENSHAW BLVD @ TORRANCE BLVD



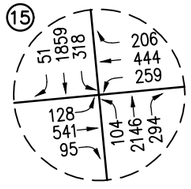
12 HAWTHORNE BVLD @ FASHION WY



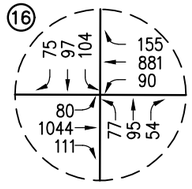
13 MADRONA AVE @ FASHION WY



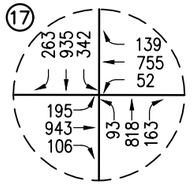
14 ANZA AVE @ W CARSON ST



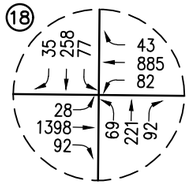
15 HAWTHORNE BLVD @ W CARSON ST



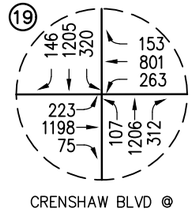
16 DEL AMO CIR E @ W CARSON ST



17 MADRONA AVE @ W CARSON ST



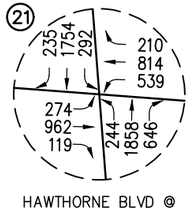
18 MAPLE AVE @ W CARSON ST



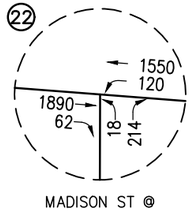
19 CRENSHAW BLVD @ W CARSON ST



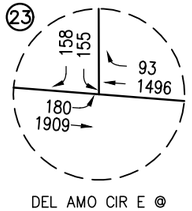
20 ANZA AVE @ SEPULVEDA BLVD



21 HAWTHORNE BLVD @ SEPULVEDA BLVD



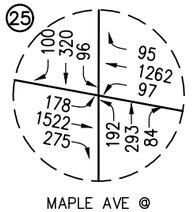
22 MADISON ST @ SEPULVEDA BLVD



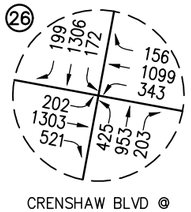
23 DEL AMO CIR E @ SEPULVEDA BLVD



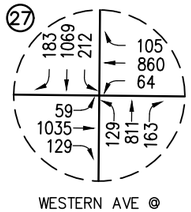
24 MADRONA AVE @ SEPULVEDA BLVD



25 MAPLE AVE @ SEPULVEDA BLVD



26 CRENSHAW BLVD @ SEPULVEDA BLVD



27 WESTERN AVE @ CARSON ST

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N NO SCALE

KEY

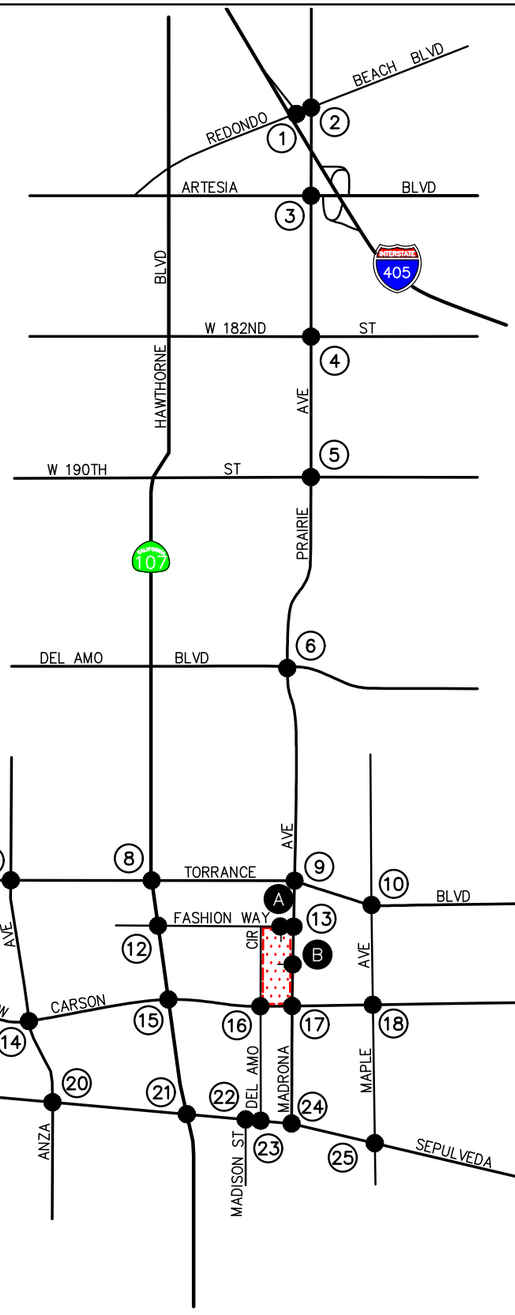
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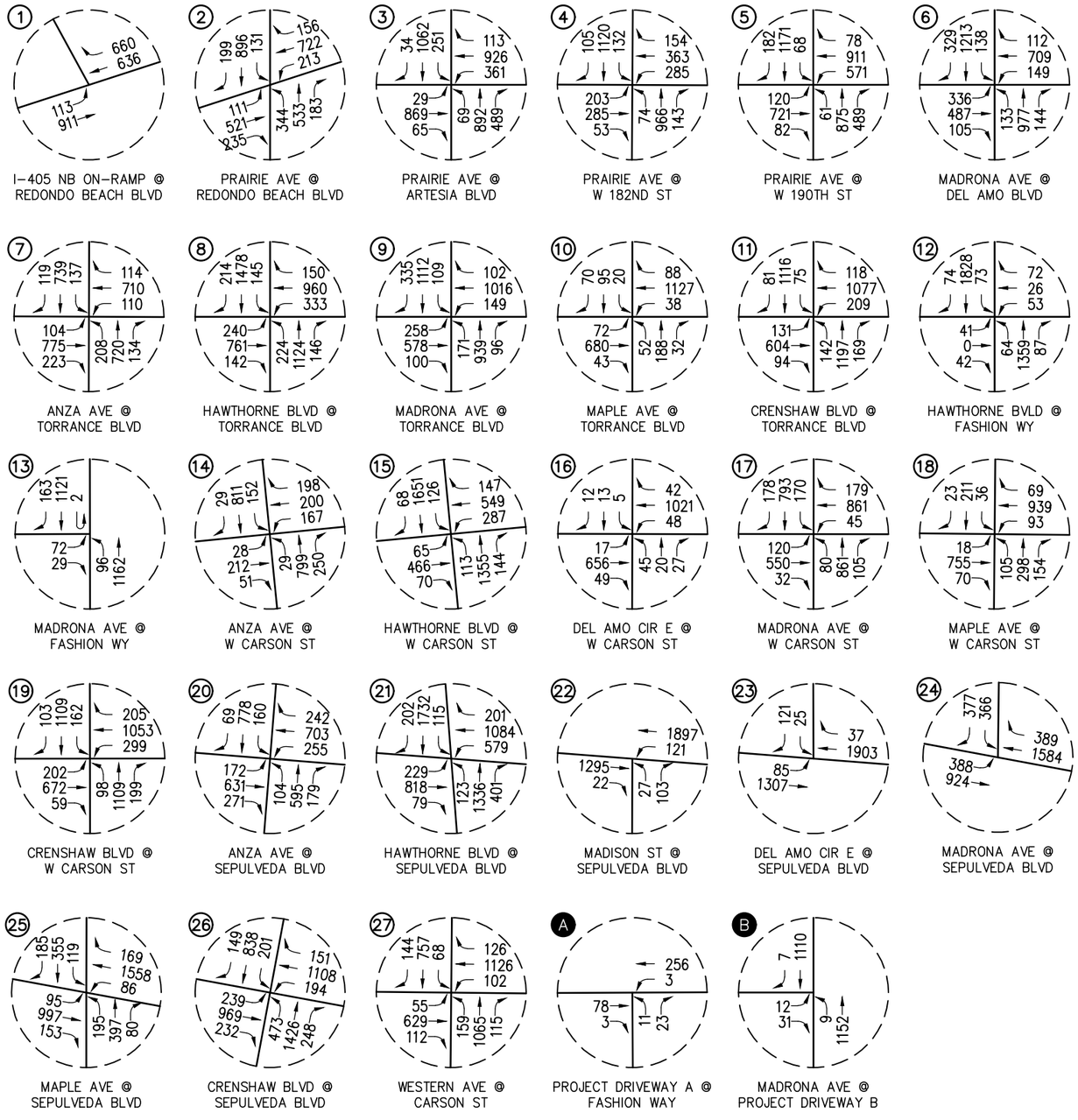
= PROJECT SITE

FIGURE 6-2

EXISTING WITH AMBIENT GROWTH (YEAR 2028) PM PEAK HOUR TRAFFIC VOLUMES

LENNAR DEL AMO, TORRANCE





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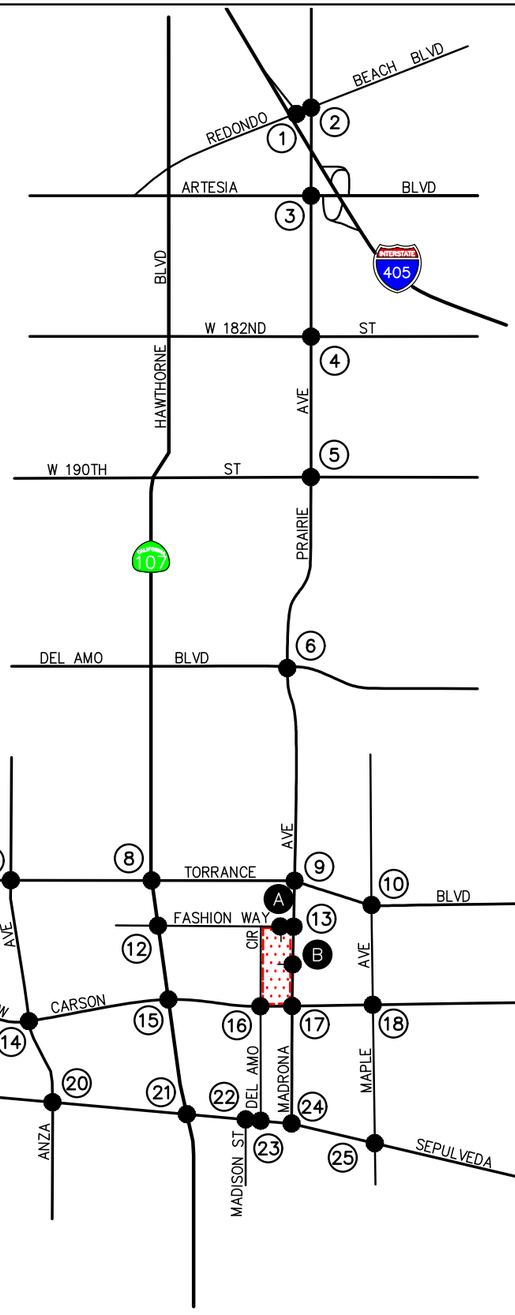
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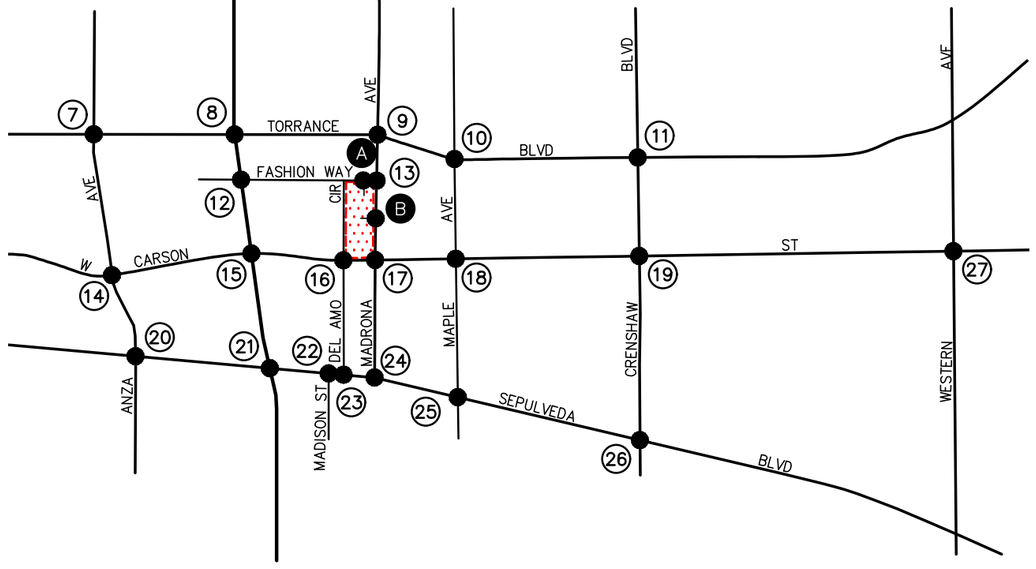
= PROJECT SITE

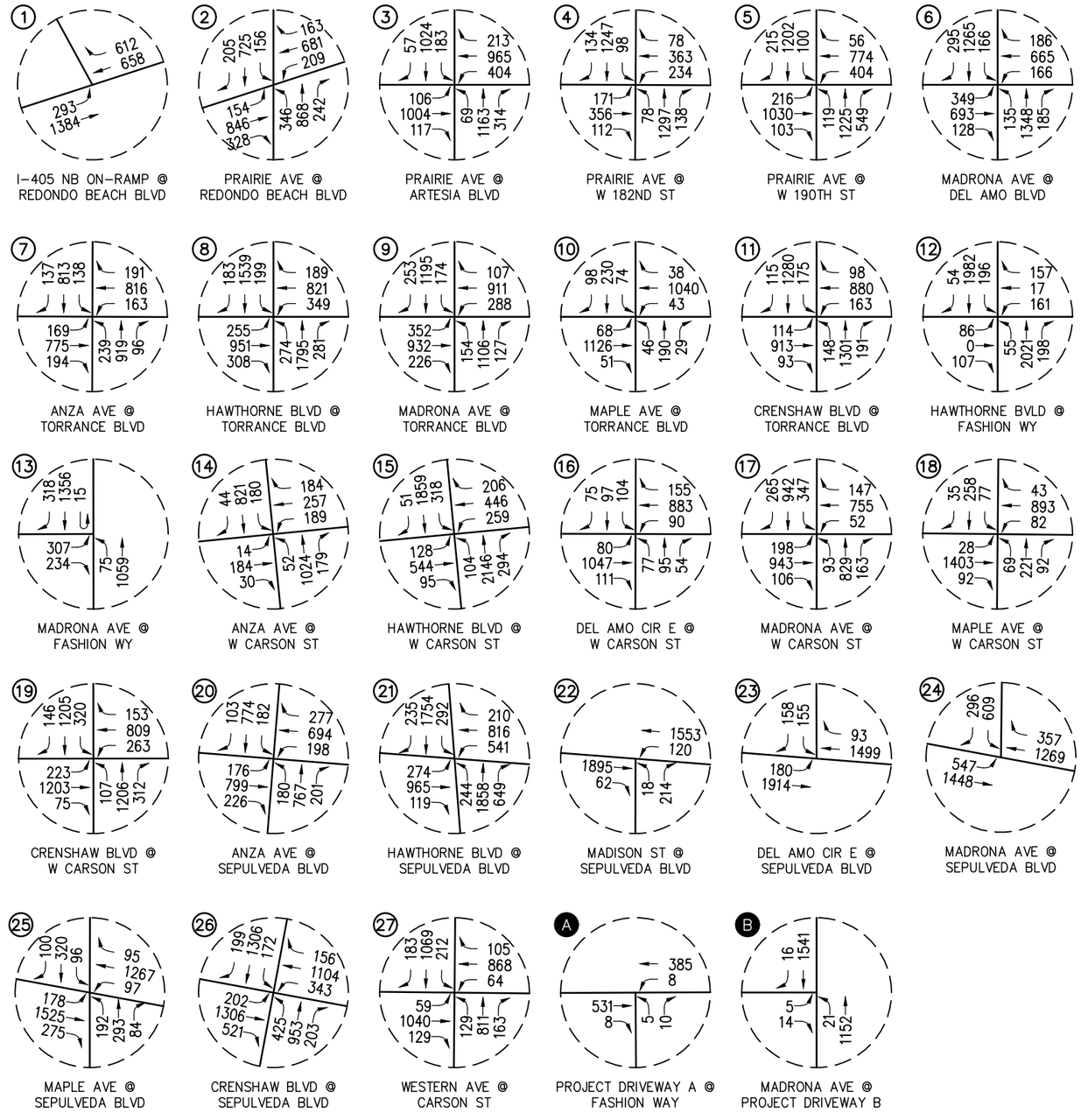
FIGURE 6-3

EXISTING WITH AMBIENT GROWTH (YEAR 2028) WITH PROJECT AM PEAK HOUR TRAFFIC VOLUMES

LENNAR DEL AMO, TORRANCE







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LLG

N

NO SCALE

KEY

(#) = STUDY INTERSECTION

= PROJECT SITE

FIGURE 6-4

EXISTING WITH AMBIENT GROWTH (YEAR 2028) WITH PROJECT PM PEAK HOUR TRAFFIC VOLUMES

LENNAR DEL AMO, TORRANCE

7.0 YEAR 2028 CONDITIONS TRAFFIC IMPACT ANALYSIS

The relative impacts of the added Project traffic volumes generated by proposed Project during the AM and PM peak hour traffic conditions were evaluated based on analysis of future Year 2028 operating conditions at the twenty-seven (27) key study intersections. The previously discussed capacity analysis procedures were utilized to investigate the future ICU/HCM relationships and service level characteristics at each study intersection. The significance of the potential impacts of the Project at each key intersection was then evaluated using the traffic impact criteria summarized in Section 3.5 of this report.

7.1 Traffic Impact Analysis Scenarios

The following scenarios are those for which AM peak hour and PM peak hour volume/capacity calculations have been performed at the key study intersections:

A. Existing Traffic Conditions;
B. Existing Traffic Conditions Plus Ambient Growth Traffic to the Year 2028;
C. Scenario (B) plus Project Traffic Conditions;
D. Scenario (C) with Improvements, if necessary;

7.2 Year 2028 Conditions Intersection Capacity Analysis

Table 7-1 summarizes the AM and PM peak hour Level of Service results at the key signalized study intersections for Year 2028 traffic conditions, based on the *Intersection Capacity Utilization (ICU)* Method of Analysis.

The first column (1) of ICU/HCM/LOS values in *Table 7-1* presents a summary of existing AM and PM peak hour traffic conditions for intersections within the City of Torrance. The second column (2) presents Existing with Ambient Growth traffic conditions based on existing intersection geometry but without any traffic generated from the proposed project. The third column (3) identifies Existing with Ambient Growth traffic conditions with the addition of project traffic. The fourth column (4) shows the increase in ICU/HCM value due to the added peak hour Project trips and indicates whether the traffic associated with the Project will exceed the LOS thresholds mentioned in this report. The fifth column (5) presents the resultant level of service of Existing With Ambient Growth with Project traffic conditions with the inclusion of planned and/or recommended traffic improvements, if needed.

7.2.1 *Existing Traffic Conditions*

Review of column (1) of *Table 7-1* indicates that for existing traffic conditions, three (3) of the twenty-seven (27) study intersections currently operate at unacceptable level of service during the AM and/or PM peak hours when compared to the LOS standards defined in this report. The remaining study intersections operate at an acceptable level of service during the AM and PM peak hours. The intersections operating adversely are as follows:

	AM Peak Hour		PM Peak Hour	
Key Intersection	ICU	LOS	ICU	LOS
2. Prairie Avenue at Redondo Beach Boulevard	0.917	E	0.975	E
26. Crenshaw Boulevard at Sepulveda Boulevard	--	--	0.946	E
27. Western Avenue at Carson Street	--	--	0.902	E

7.2.2 *Existing With Ambient Growth (Year 2028) Traffic Conditions*

Review of column (2) of *Table 7-1* indicates that for Existing with Ambient Growth traffic conditions, four (4) of the twenty-seven (27) study intersections are forecast to operate at unacceptable level of service during the AM and/or PM peak hours when compared to the LOS standards defined in this report. The remaining study intersections operate at an acceptable level of service during the AM and PM peak hours. The intersections operating adversely are as follows:

	AM Peak Hour		PM Peak Hour	
Key Intersection	ICU	LOS	ICU	LOS
2. Prairie Avenue at Redondo Beach Boulevard	0.934	E	0.993	E
21. Hawthorne Boulevard at Sepulveda Boulevard	--	--	0.904	E
26. Crenshaw Boulevard at Sepulveda Boulevard	--	--	0.964	E
27. Western Avenue at Carson Street	--	--	0.918	E

7.2.3 *Existing With Ambient Growth (Year 2028) With Project Traffic Conditions*

Review of column (3) of *Table 7-1* indicates that for Existing with Ambient Growth with Project traffic conditions, four (4) of the twenty-seven (27) study intersections are forecast to continue to operate at unacceptable level of service during the AM and PM peak hours, based on the LOS standards specified in this report. The remaining study intersections are forecast to operate at an acceptable level of service during the AM and PM peak hours. The intersections forecast to operate adversely are as follows:

	AM Peak Hour		PM Peak Hour	
Key Intersection	ICU	LOS	ICU	LOS
2. Prairie Avenue at Redondo Beach Boulevard	0.953	E	1.002	F
21. Hawthorne Boulevard at Sepulveda Boulevard	--	--	0.905	E
26. Crenshaw Boulevard at Sepulveda Boulevard	--	--	0.964	E
27. Western Avenue at Carson Street	0.901	E	0.920	E

Review of column (4) of *Table 7-1* indicates that one (1) study intersection exceeds the level of service thresholds and require Project-related improvements under the Existing with Ambient Growth with Project traffic conditions by the Project, which includes Prairie Avenue at Redondo Beach Boulevard (Intersection #2). Review of column (5) indicates that the implementation of planned and/or recommended improvements at the intersection will help offset the Project's increment as well as accommodate existing traffic volumes at the intersection of Prairie Avenue at Redondo Beach Boulevard. Planned and recommended improvements are discussed in Section 10.0. ***Appendix B*** contains the ICU/HCM/LOS calculation worksheets.

TABLE 7-1

YEAR 2028 CONDITIONS PEAK HOUR INTERSECTION CAPACITY ANALYSIS SUMMARY

	Key Intersection	Time Period	(1) Existing Traffic Conditions		(2) Existing With Ambient Growth (Year 2028) Traffic Conditions		(3) Existing With Ambient Growth (Year 2028) With Project Traffic Conditions		(4) Exceed LOS Thresholds (3) – (2)		(5) Existing With A.G. (Year 2028) With Project With Mitigation	
			ICU/HCM	LOS	ICU/HCM	LOS	ICU/HCM	LOS	Increase	Yes/No	ICU/HCM	LOS
1.	I-405 NB On-Ramp at	AM	1.5 s/v	A	1.5 s/v	A	1.5 s/v	A	0.0 s/v	No	--	--
	Redondo Beach Boulevard	PM	3.2 s/v	A	3.3 s/v	A	3.3 s/v	A	0.0 s/v	No	--	--
2.	Prairie Avenue at	AM	**0.917**	**E**	**0.934**	**E**	**0.953**	**E**	**0.019**	**Yes**	0.839	D
	Redondo Beach Boulevard	PM	**0.975**	**E**	**0.993**	**E**	**1.002**	**F**	0.009	No	**0.905**	**E**
3.	Prairie Avenue at	AM	0.778	C	0.792	C	0.795	C	0.003	No	--	--
	Artesia Boulevard	PM	0.816	D	0.830	D	0.837	D	0.007	No	--	--
4.	Prairie Avenue at	AM	0.768	C	0.782	C	0.785	C	0.003	No	--	--
	West 182nd Street	PM	0.839	D	0.855	D	0.859	D	0.004	No	--	--
5.	Prairie Avenue at	AM	0.732	C	0.746	C	0.748	C	0.002	No	--	--
	West 190th Street	PM	0.783	C	0.797	C	0.801	D	0.004	No	--	--
6.	Madrona Avenue at	AM	0.722	C	0.735	C	0.737	C	0.002	No	--	--
	Del Amo Boulevard	PM	0.751	C	0.765	C	0.767	C	0.002	No	--	--
7.	Anza Avenue at	AM	0.738	C	0.751	C	0.751	C	0.000	No	--	--
	Torrance Boulevard	PM	0.825	D	0.840	D	0.840	D	0.000	No	--	--
8.	Hawthorne Boulevard at	AM	0.678	B	0.690	B	0.692	B	0.002	No	--	--
	Torrance Boulevard	PM	0.755	C	0.768	C	0.769	C	0.001	No	--	--
9.	Madrona Avenue at	AM	0.699	B	0.712	C	0.714	C	0.002	No	--	--
	Torrance Boulevard	PM	0.790	C	0.804	D	0.809	D	0.005	No	--	--

Notes:

- ICU = Intersection Capacity Utilization
- HCM = Highway Capacity Manual
- s/v = seconds per vehicle (delay)
- LOS = Level of Service, please refer to *Tables 3-1* and *3-2* for the LOS definitions
- **Bold ICU /LOS values** indicate adverse service levels based on the LOS standards mentioned in this report

TABLE 7-1 (CONTINUED)

YEAR 2028 CONDITIONS PEAK HOUR INTERSECTION CAPACITY ANALYSIS SUMMARY

Key Intersection	Time Period	(1) Existing Traffic Conditions		(2) Existing With Ambient Growth (Year 2028) Traffic Conditions		(3) Existing With Ambient Growth (Year 2028) With Project Traffic Conditions		(4) Exceed LOS Thresholds (3) – (2)		(5) Existing With A.G. (Year 2028) With Project With Mitigation	
		ICU/HCM	LOS	ICU/HCM	LOS	ICU/HCM	LOS	Increase	Yes/No	ICU/HCM	LOS
10. Maple Avenue at Torrance Boulevard	AM	0.663	B	0.674	B	0.675	B	0.001	No	--	--
	PM	0.665	B	0.677	B	0.678	B	0.001	No	--	--
11. Crenshaw Boulevard at Torrance Boulevard	AM	0.668	B	0.680	B	0.680	B	0.000	No	--	--
	PM	0.798	C	0.813	D	0.814	D	0.001	No	--	--
12. Hawthorne Boulevard at Fashion Way	AM	0.453	A	0.461	A	0.461	A	0.000	No	--	--
	PM	0.586	A	0.597	A	0.599	A	0.002	No	--	--
13. Madrona Avenue at Fashion Way	AM	0.377	A	0.384	A	0.392	A	0.008	No	--	--
	PM	0.542	A	0.551	A	0.555	A	0.004	No	--	--
14. Anza Avenue at Carson Street	AM	0.732	C	0.745	C	0.745	C	0.000	No	--	--
	PM	0.771	C	0.786	C	0.788	C	0.002	No	--	--
15. Hawthorne Boulevard at Carson Street	AM	0.694	B	0.706	C	0.706	C	0.000	No	--	--
	PM	0.819	D	0.834	D	0.835	D	0.001	No	--	--
16. Del Amo Circle East at Carson Street	AM	0.353	A	0.358	A	0.359	A	0.001	No	--	--
	PM	0.478	A	0.485	A	0.486	A	0.001	No	--	--
17. Madrona Avenue at Carson Street	AM	0.581	A	0.591	A	0.597	A	0.006	No	--	--
	PM	0.632	B	0.643	B	0.650	B	0.007	No	--	--
18. Maple Avenue at Carson Street	AM	0.697	B	0.709	C	0.710	C	0.001	No	--	--
	PM	0.816	D	0.832	D	0.833	D	0.001	No	--	--

Notes:

- ICU = Intersection Capacity Utilization
- HCM = Highway Capacity Manual
- s/v = seconds per vehicle (delay)
- LOS = Level of Service, please refer to *Tables 3-1* and *3-2* for the LOS definitions
- **Bold ICU /LOS values** indicate adverse service levels based on the LOS standards mentioned in this report

TABLE 7-1 (CONTINUED)
YEAR 2028 CONDITIONS PEAK HOUR INTERSECTION CAPACITY ANALYSIS SUMMARY

Key Intersection	Time Period	(1) Existing Traffic Conditions		(2) Existing With Ambient Growth (Year 2028) Traffic Conditions		(3) Existing With Ambient Growth (Year 2028) With Project Traffic Conditions		(4) Exceed LOS Thresholds (3) – (2)		(5) Existing With A.G. (Year 2028) With Project With Mitigation	
		ICU/HCM	LOS	ICU/HCM	LOS	ICU/HCM	LOS	Increase	Yes/No	ICU/HCM	LOS
19. Crenshaw Boulevard at Carson Street	AM	0.771	C	0.786	C	0.786	C	0.000	No	--	--
	PM	0.804	D	0.819	D	0.820	D	0.001	No	--	--
20. Anza Avenue at Sepulveda Boulevard	AM	0.703	C	0.715	C	0.715	C	0.000	No	--	--
	PM	0.790	C	0.804	D	0.805	D	0.001	No	--	--
21. Hawthorne Boulevard at Sepulveda Boulevard	AM	0.785	C	0.800	C	0.801	D	0.001	No	--	--
	PM	0.888	D	**0.904**	**E**	**0.905**	**E**	0.001	No	--	--
22. Madison Street at Sepulveda Boulevard	AM	0.565	A	0.575	A	0.576	A	0.001	No	--	--
	PM	0.615	B	0.625	B	0.626	B	0.001	No	--	--
23. Del Amo Circle East at Sepulveda Boulevard	AM	0.613	B	0.624	B	0.625	B	0.001	No	--	--
	PM	0.612	B	0.623	B	0.624	B	0.001	No	--	--
24. Madrona Avenue at Sepulveda Boulevard	AM	0.676	B	0.688	B	0.692	B	0.004	No	--	--
	PM	0.750	C	0.763	C	0.766	C	0.003	No	--	--
25. Maple Avenue at Sepulveda Boulevard	AM	0.629	B	0.640	B	0.640	B	0.000	No	--	--
	PM	0.715	C	0.728	C	0.729	C	0.001	No	--	--
26. Crenshaw Boulevard at Sepulveda Boulevard	AM	0.694	B	0.706	C	0.708	C	0.002	No	--	--
	PM	**0.946**	**E**	**0.964**	**E**	**0.964**	**E**	0.000	No	--	--
27. Western Avenue at Carson Street	AM	0.884	D	0.900	D	**0.901**	**E**	0.001	No	--	--
	PM	**0.902**	**E**	**0.918**	**E**	**0.920**	**E**	0.002	No	--	--

Notes:
- ICU = Intersection Capacity Utilization
- HCM = Highway Capacity Manual
- s/v = seconds per vehicle (delay)
- LOS = Level of Service, please refer to *Tables 3-1* and *3-2* for the LOS definitions
- **Bold ICU /LOS values** indicate adverse service levels based on the LOS standards mentioned in this report

8.0 STATE OF CALIFORNIA (CALTRANS) ASSESSMENT

The Department of Transportation (Caltrans) has also formally adopted VMT as the metric for reviewing the transportation impacts of a land use development project. Caltrans has released the Vehicle Miles Traveled-Focused *Transportation Impact Study Guide (TISG)*, dated May 20, 2020 in order to provide guidance on Caltrans' review of land use projects.

Caltrans' TISG references the *Technical Advisory on Evaluating Transportation Impacts In California Environmental Quality Act* (CEQA), dated December 2018, prepared by the State of California Governor's Office of Planning and Research (OPR) as the basis for its guidance on VMT assessment. The City of Torrance adopted new traffic impact criteria to be consistent with the CEQA revisions and OPR recommendations. These new guidelines are contained within the *City of Torrance Traffic Impact Assessment Guidelines for Land Use Projects (dated January 2021)*, and provide screening criteria and methodology for VMT analysis. Since the City's guidelines are generally consistent with OPR guidelines, no separate VMT analysis has been prepared for Caltrans' review of the proposed project. The VMT analysis for this project is contained within a separate document (i.e. refer *Vehicle Miles Traveled (VMT) Screening Assessment for the Proposed Lennar Del Amo Project, dated September 4, 2024 prepared by LLG).*

Although Caltrans has also formally adopted VMT as the metric for reviewing the transportation impacts of a land use development project, to address the Project's potential operational impacts, Level of Service (LOS) calculations for state-controlled study intersections have been prepared in conformance with the prior Caltrans *Guide for the Preparation of Traffic Impact Studies, dated December 2002.* Existing and projected peak hour operating conditions at the six (6) state-controlled study intersections within the study area have been evaluated using the *Highway Capacity Manual* operations method of analysis. These state-controlled locations include the following study intersections:

1. I-405 NB On-Ramp at Redondo Beach Boulevard (Torrance/Caltrans)
8. Hawthorne Boulevard at Torrance Boulevard (Torrance/Caltrans)
12. Hawthorne Boulevard at Fashion Way (Torrance/Caltrans)
15. Hawthorne Boulevard at Carson Street (Torrance/Caltrans)
21. Hawthorne Boulevard at Sepulveda Boulevard (Torrance/Caltrans)
27. Western Avenue at Carson Street (Torrance/Caltrans)

Since Caltrans no longer required delay base intersection analysis for joint jurisdiction locations, thresholds of significant are based on the applicable City's standards. For this analysis, LOS D is the target level of service standard and will be utilized to assess the operating conditions at the state-controlled study intersections.

8.1 Highway Capacity Manual (HCM) Method of Analysis (Signalized Intersections)

Based on the HCM 7th Edition operations method of analysis, level of service for signalized intersections is defined in terms of control delay, which is a measure of driver discomfort, frustration, fuel consumption and lost travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, geometries, traffic and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during ideal conditions: in the absence of traffic control, in the absence of geometric delay, in the absence of any incidents and when there are no other vehicles on the road.

In the HCM, only the portion of total delay attributed to the control facility is quantified. This delay is called *control delay.* Control delay includes initial deceleration delay, queue move-up time, stopped delay and final acceleration delay. Specifically, LOS standards for traffic signals are stated in terms of the average control delay per vehicle. The six qualitative categories of Level of Service that have been defined along with the corresponding HCM control delay value range for signalized intersections are shown in ***Table 8-1***.

TABLE 8-1

LEVEL OF SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS (HCM METHODOLOGY)[5]

Level of Service (LOS)	Control Delay Per Vehicle (seconds/vehicle)	Level of Service Description
A	$\leq$ 10.0	This level of service occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.
B	> 10.0 and $\leq$ 20.0	This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of average delay.
C	> 20.0 and $\leq$ 35.0	Average traffic delays. These higher delays may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.
D	> 35.0 and $\leq$ 55.0	Long traffic delays. At level D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high *v/c* ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	> 55.0 and $\leq$ 80.0	Very long traffic delays. This level is considered by many agencies (i.e. SANBAG) to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high *v/c* ratios. Individual cycle failures are frequent occurrences.
F	$\geq$ 80.0	Severe congestion. This level, considered to be unacceptable to most drivers, often occurs with over saturation, that is, when arrival flow rates exceed the capacity of the intersection. It may also occur at high *v/c* ratios below 1.0 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors to such delay levels.

[5] Source: *Highway Capacity Manual* (Signalized Intersections).

8.2 Year 2028 Conditions Intersection Capacity Analysis

Table 8-2 summarizes the AM and PM peak hour Level of Service results at the six (6) state-controlled study intersections for Year 2028 traffic conditions, based on the *Highway Capacity Manual (HCM)* Method of Analysis. The first column (1) of Delay/LOS values in *Table 8-2* presents a summary of existing AM and PM peak hour traffic conditions. The second column (2) presents Existing with Ambient Growth traffic conditions based on existing intersection geometry but without any traffic generated from the proposed project. The third column (3) identifies Existing with Ambient Growth traffic conditions with the addition of project traffic. The fourth column (4) indicates whether the traffic associated with the Project will exceed the LOS thresholds mentioned in this report. The fifth column (5) presents the resultant level of service of Existing With Ambient Growth with Project traffic conditions with the inclusion of planned and/or recommended traffic improvements, if needed.

8.2.1 *Existing Traffic Conditions*

Review of column (1) of *Table 8-2* indicates that for existing traffic conditions, all six (6) state-controlled study intersections currently operate at acceptable level of service D or better during the AM and PM peak hours.

8.2.2 *Existing With Ambient Growth (Year 2028) Traffic Conditions*

Review of column (2) of *Table 8-2* indicates that for Existing with Ambient Growth traffic conditions, all six (6) state-controlled study intersections are forecast to operate at acceptable level of service D or better during the AM and PM peak hours.

8.2.3 *Existing With Ambient Growth (Year 2028) With Project Traffic Conditions*

Review of column (3) of *Table 8-2* indicates that for Existing with Ambient Growth with Project traffic conditions, all six (6) state-controlled study intersections are forecast to operate at acceptable level of service D or better during the AM and PM peak hours. Review of column (4) indicates that the proposed Project is not anticipated to exceed the level of service thresholds at any of the state-controlled study intersections. Therefore, no improvements are recommended.

Appendix C contains the HCM/LOS calculation worksheets for the Year 2028 Traffic Conditions.

TABLE 8-2

YEAR 2028 CONDITIONS PEAK HOUR INTERSECTION CAPACITY ANALYSIS SUMMARY – CALTRANS

Key Intersection	Time Period	(1) Existing Traffic Conditions		(2) Existing With Ambient Growth (Year 2028) Traffic Conditions		(3) Existing With Ambient Growth (Year 2028) With Project Traffic Conditions		(4) Exceed LOS Thresholds	(5) Existing With A.G. (Year 2028) With Project With Mitigation	
		Delay (s/v)	LOS	Delay (s/v)	LOS	Delay (s/v)	LOS	Yes/No	Delay (s/v)	LOS
1. I-405 NB On-Ramp at Redondo Beach Boulevard	AM	1.5	A	1.5	A	1.5	A	No	--	--
	PM	3.2	A	3.3	A	3.3	A	No	--	--
8. Hawthorne Boulevard at Torrance Boulevard	AM	34.8	C	35.2	D	35.3	D	No	--	--
	PM	36.8	D	37.6	D	37.7	D	No	--	--
12. Hawthorne Boulevard at Fashion Way	AM	10.7	B	10.8	B	10.9	B	No	--	--
	PM	16.7	B	16.9	B	17.0	B	No	--	--
15. Hawthorne Boulevard at Carson Street	AM	25.5	C	25.7	C	25.8	C	No	--	--
	PM	30.0	C	30.0	C	30.0	C	No	--	--
21. Hawthorne Boulevard at Sepulveda Boulevard	AM	39.1	D	40.1	D	40.5	D	No	--	--
	PM	47.0	D	48.5	D	48.7	D	No	--	--
27. Western Avenue at Carson Street	AM	27.1	C	27.6	C	27.6	C	No	--	--
	PM	29.4	C	29.7	C	29.8	C	No	--	--

Notes:

- s/v = seconds per vehicle (delay)
- LOS = Level of Service, please refer to *Table 8-1* for the LOS definitions
- **Bold ICU/LOS values** indicate adverse service levels based on the LOS standards mentioned in this report

9.0 SITE ACCESS EVALUATION

9.1 Site Access

Vehicular access would be provided via one (1) full access unsignalized driveway located on Madrona Avenue which will utilize the existing median break between El Dorado Street and Onrado Street for left-turn access (ingress and egress) and one (1) full access driveway on Fashion Way. *Figure 2-2* presents the Project site plan prepared by KTGY, Architecture + Planning.

9.1.1 *Level of Service Evaluation*

Table 9-1 presents the level of service results at the project driveways under Existing with Ambient Growth with Project traffic conditions. Review of *Table 9-1* indicates that Project Driveway A is expected to operate at LOS A and LOS B during the AM peak hour and PM peak hour, respectively, whereas Project Driveway B is forecast to operate at LOS C during both the morning and evening peak hours. ***Appendix D*** contains the Delay/LOS calculation worksheets for Year 2028 Traffic Conditions at the Project Driveways.

TABLE 9-1

PROJECT DRIVEWAY PEAK HOUR INTERSECTION CAPACITY ANALYSIS SUMMARY (HCM METHODOLOGY)

Key Intersection		Time Period	Control Type	(1) Existing With Ambient Growth (Year 2028) With Project Traffic Conditions	
				Delay (s/v)	LOS
A.	Project Driveway A at Fashion Way	AM	One-Way Stop	9.1	A
		PM		11.1	B
B.	Madrona Avenue at Project Driveway B	AM	One-Way Stop	17.9	C
		PM		24.7	C

Notes:

- s/v = seconds per vehicle (delay)
- LOS = Level of Service, please refer to *Table 3-2* for the LOS definitions

9.2 Sight Distance Evaluation

At intersections and/or project driveways, a substantially clear line of sight should be maintained between the driver of a vehicle waiting at the crossroad and the driver of an approaching vehicle. Adequate time must be provided for the waiting vehicle to either cross all lanes of through traffic, cross the near lanes and turn left, or turn right, without requiring through traffic to radically alter their speed. A sight distance evaluation has been performed for the project driveways.

The Sight Distance Evaluation prepared for the project driveways are based on the criteria and procedures set forth by the California Department of Transportation (Caltrans) in the State's *Highway Design Manual (HDM)*. Corner sight distance was utilized for the evaluation. Corner sight distance is defined in the Caltrans HDM to be the distance required by the driver of a vehicle, traveling at a given speed, to maneuver their vehicle and avoid an object without radically altering their speed. Line of sight for corner sight distance is to be determined from a 3½ foot height at the location of the driver of a vehicle on a minor road to a 4¼ foot object height in the center of the approaching lane of the major road.

Based on the criteria set forth in Table 405.1A of the Caltrans HDM and a prima facie speed limit of 25 mph on Fashion Way, a corner sight distance of 239 feet for right-turning vehicles, 288 feet for left-turning vehicles looking right, and 251 feet for left-turning vehicles looking left is required for Project Driveway A.

Based on the criteria set forth in Table 405.1A of the Caltrans HDM and a posted speed limit of 40 mph on Madrona Avenue, a corner sight distance of 382 feet for right-turning vehicles, 490 feet for left-turning vehicles looking right, and 431 feet for left-turning vehicles looking left is required for Project Driveway B.

9.2.1 *Project Driveway A Line of Sight Evaluation*

Figure 9-1 presents the result of the sight distance evaluation for left-turning vehicles at Project Driveway A on Fashion Way based on the application of the corner sight distance criteria. This figure illustrates the limited use areas. As shown, the sight lines at the proposed Project driveway are expected to be adequate as long as obstructions within the sight triangles are minimized. It should be noted that Fashion Way terminates approximately 242 feet east of the proposed Project driveway, at the intersection of madrona Avenue. Nevertheless, the sight distance provided on *Figure 9-1* is illustrated as 288-feet for vehicles either turning left or right from Madrona Avenue onto Fashion Way. As shown, sight lines are considered adequate since vehicles turning from Madrona Avenue would be approaching at lower speeds.

Figure 9-2 presents the results of the sight distance evaluation for right-turning vehicles at Project Driveway A based on the application of the corner sight distance criteria. The figure illustrates the limited use areas. As shown, the sight lines at the proposed Project driveway are expected to be adequate as long as obstructions within the sight triangles are minimized.

9.2.2 *Project Driveway B Line of Sight Evaluation*

Figure 9-3 presents the result of the sight distance evaluation for left-turning vehicles at Project Driveway B based on the application of the corner sight distance criteria. This figure illustrates the limited use areas. As shown, the sight lines at the proposed Project driveway are expected to be adequate as long as obstructions within the sight triangles are minimized. From a review of current field conditions, the existing tree spacing within the median on Madrona Avenue allow for adequate sight lines. However, to maintain adequate sight lines it is recommended that the maximum tree size and minimum tree spacing in the limited use area within the median shall be 24-inch caliper tree trunks (maximum size at maturity) spaced at 60-feet on center; the tree canopy shall be no lower than 72-inches above the curb to ensure adequate sight lines are maintained.

Figure 9-4 presents the results of the sight distance evaluation for right-turning vehicles at Project Driveway B based on the application of the corner sight distance criteria. The figure illustrates the limited use areas. As shown, the sight lines at the proposed Project driveway are expected to be adequate as long as obstructions within the sight triangles are minimized.

9.3 Queuing Evaluation

In response to City staff concerns regarding Project Driveway A, LLG conducted a queuing assessment for the eastbound approach on Fashion Way at Madrona Avenue to assess the potential impact of existing and/or vehicular queues that may impede westbound left-turn access to the subject property and thus result in limiting access this Project driveway to "right-turn in/out only" turning movements.

In addition, a queuing evaluation was completed for the northbound left-turn lane at the proposed Project Driveway B along Madrona to validate that the storage provided is adequate to accommodate the proposed Project traffic. As shown in *Figure 2-2*, the existing storage for the northbound left-turn lane is 180-feet with a 60-foot transition. The queuing evaluation was conducted based on Existing with Ambient Growth with Project peak hour traffic volumes and the HCM 95th Percentile methodology. Based on the queuing evaluation for the northbound left-turn movement at the Project driveway along Madrona Avenue, the anticipated queues do not exceed more than one (1) vehicle (see *Appendix D* pages D-6 and D-10) during both the AM and PM peak hours, and therefore the proposed storage is considered adequate.

Relative to ingress and egress at Project Driveway A along Fashion Way, a queuing analysis has been completed. The westbound left-turn into the site, as well as the property to the north (Torrance Civic Plaza and Medical Center) is able to do so via a two-way left-turn lane that can accommodate 110-feet of vehicular queue for the westbound left-turn movement and 40-feet of vehicular queue for the eastbound left-turn movement. The anticipated queues do not exceed more than one (1) vehicle (see *Appendix D* pages D-4 and D-8) during both the AM and PM peak hours for westbound left-turn into the site, and therefore the proposed storage is considered adequate.

In addition, the potential eastbound vehicular queues on Fashion Way at Madrona Avenue have been analyzed. Project Driveway A is located approximately 250-feet from the signalized intersection of

Madrona Avenue/Fashion Way. Based on the queuing evaluation, a maximum 95th percentile queue of 280-feet (140-feet per lane) (see *Appendix E* page E-11) and 220-feet for the eastbound left-turn and eastbound right-turn movements at the intersection of Madrona Avenue/Fashion Way would be required to accommodate a vehicular queue of up to 12 vehicles and 9 vehicles, respectively (see *Appendix E* page E-11). It should be noted that a vehicle is equivalent to 25'. It should also be noted that the inner lane for the eastbound left-turn movement can accommodate 4 vehicles and the remaining 8 vehicles would be accommodated by the outer eastbound left-turn lane. Therefore, the anticipated queue would not affect the ingress and egress to and from the Project site.

Appendix E contains the queuing evaluation worksheets for Year 2028 Traffic Conditions at Fashion Way at Madrona Avenue.

Figure 9-5 graphically presents the eastbound vehicular queues at the intersection of Madrona Avenue at Fashion Way as well as the westbound left-turn in queue for Project Driveway A. It should be noted that the queue lengths shown in *Figure 9-5* are rounded up to the nearest whole vehicle. Review of *Figure 9-5* shows that ingress and egress for the Project site through Project Driveway A is considered adequate. As such, no modifications to the existing striping on Fashion Way or turn restrictions at Project Driveway A are required or recommended.

9.4 Internal Circulation

The Project driveways on Madrona Avenue and Fashion Way will provide access to the subject property for various types of trucks and passenger vehicles. On-site circulation was evaluated for a trash truck and fire truck and was performed using the *Turning Vehicle Templates*, developed by Jack E. Leisch & Associates and *AutoTURN for AutoCAD* computer software that simulates turning maneuvers for various types of vehicles. A large truck turning template for a trash truck and fire truck was utilized in this evaluation.

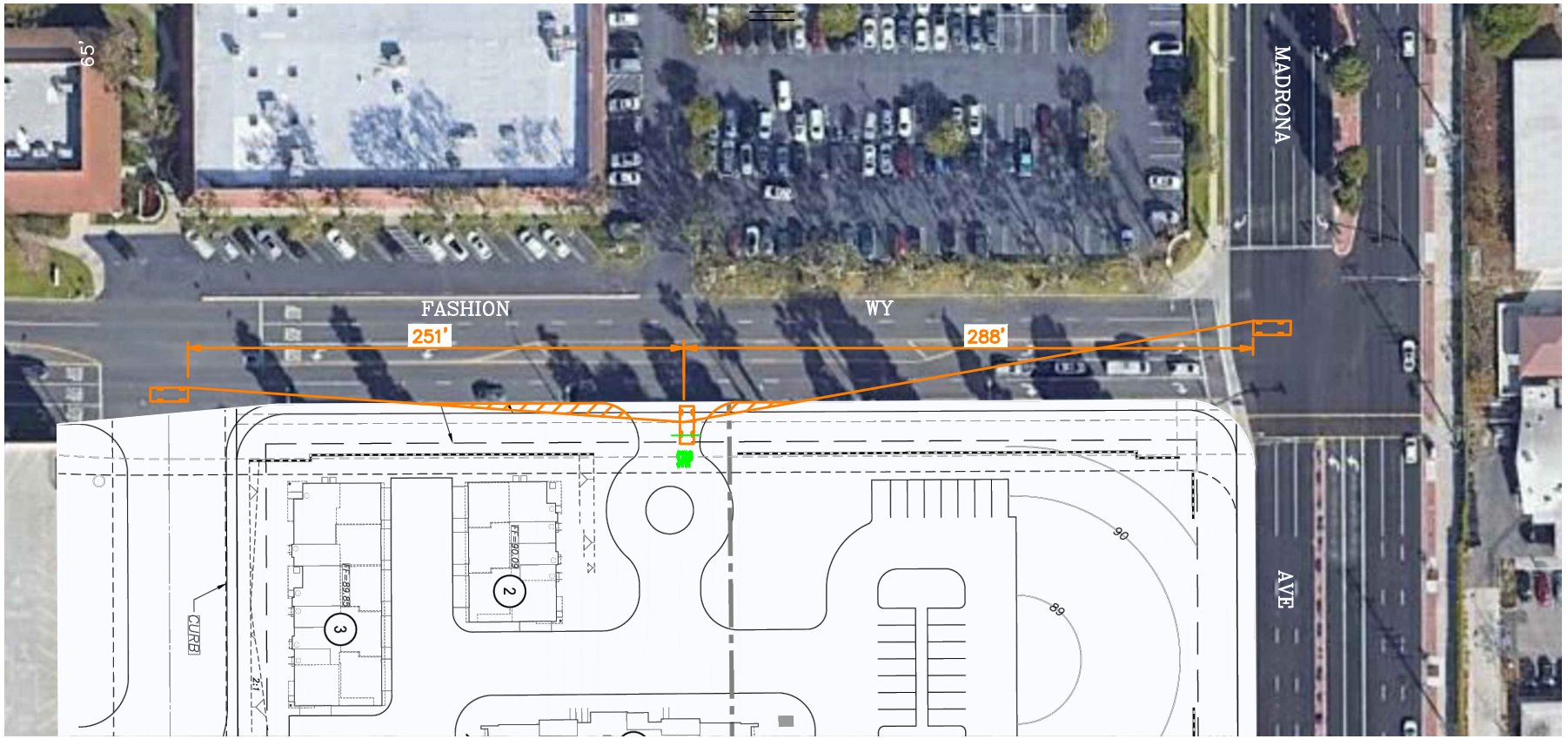
Figure 9-6 and ***Figure 9-7*** illustrates the turning movements required of a trash truck and fire truck, respectively, as it accesses and circulates through the site. Review of *Figures 9-6* and *9-7* shows that access to and from the site via a trash truck and fire truck are considered adequate.

SIGHT DISTANCE

DESIGN SPEED LIMIT:	25 MPH
REQUIRED CORNER SIGHT DISTANCE LOOKING LEFT:	251 FEET
REQUIRED CORNER SIGHT DISTANCE LOOKING RIGHT:	288 FEET

LEGEND

PUBLIC RIGHT-OF-WAY LIMITED USE AREA: TO ENSURE ADEQUATE SIGHT DISTANCE, HARDSCAPE AND/OR LANDSCAPE SHALL NOT BE HIGHER THAN 30 INCHES ABOVE THE CURB/SIDEWALK. NO FENCES OR WALLS IN LIMITED USE AREA.



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LLG

N NO SCALE

FIGURE 9-1

PROJECT DRIVEWAY A SIGHT DISTANCE ANALYSIS – LEFT TURNING VEHICLES

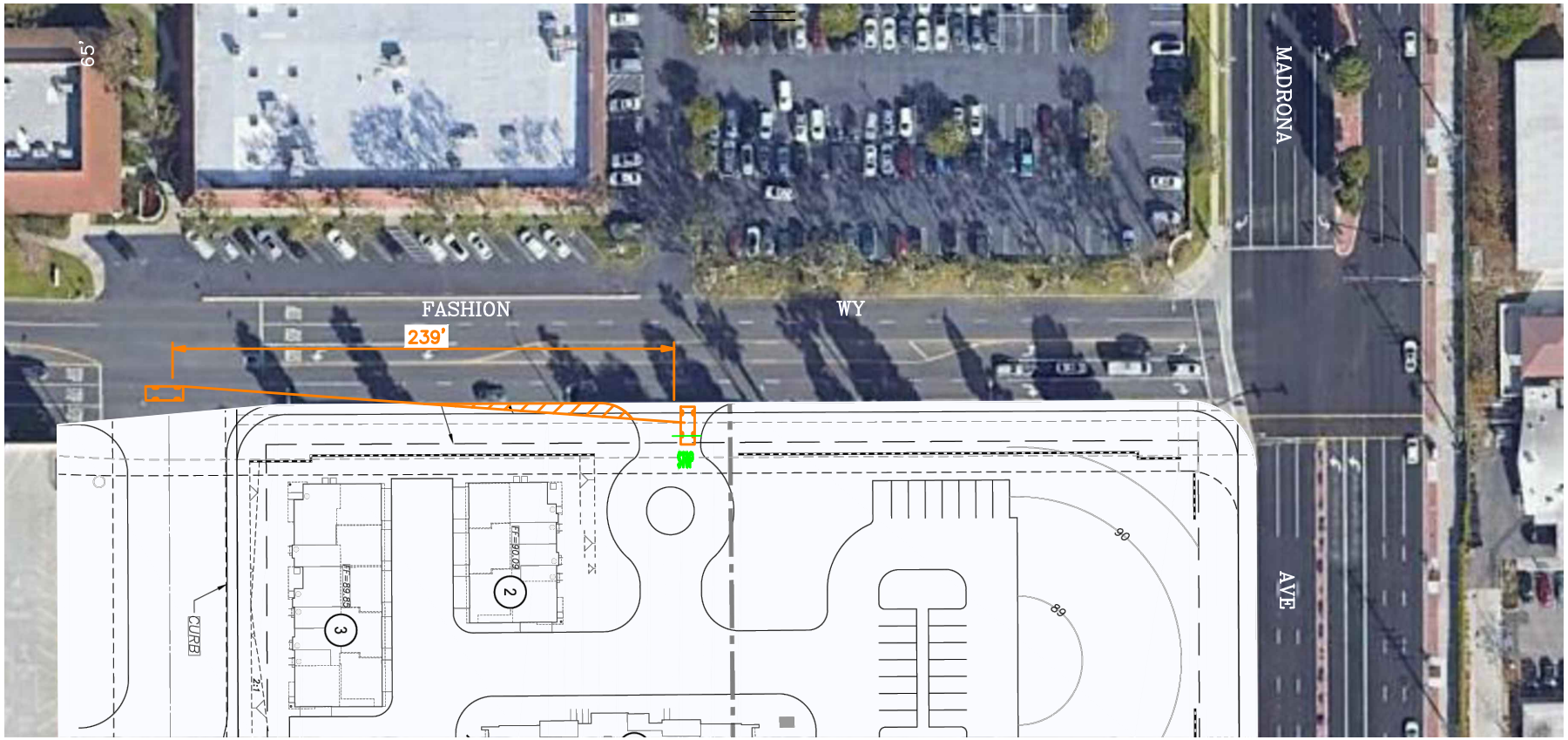
LENNAR DEL AMO, TORRANCE

SIGHT DISTANCE

DESIGN SPEED LIMIT:	25 MPH
REQUIRED CORNER SIGHT DISTANCE LOOKING LEFT:	239 FEET

LEGEND

PUBLIC RIGHT-OF-WAY LIMITED USE AREA: TO ENSURE ADEQUATE SIGHT DISTANCE, HARDSCAPE AND/OR LANDSCAPE SHALL NOT BE HIGHER THAN 30 INCHES ABOVE THE CURB/SIDEWALK. NO FENCES OR WALLS IN LIMITED USE AREA.



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FIGURE 9-2

PROJECT DRIVEWAY A SIGHT DISTANCE ANALYSIS – RIGHT TURNING VEHICLES

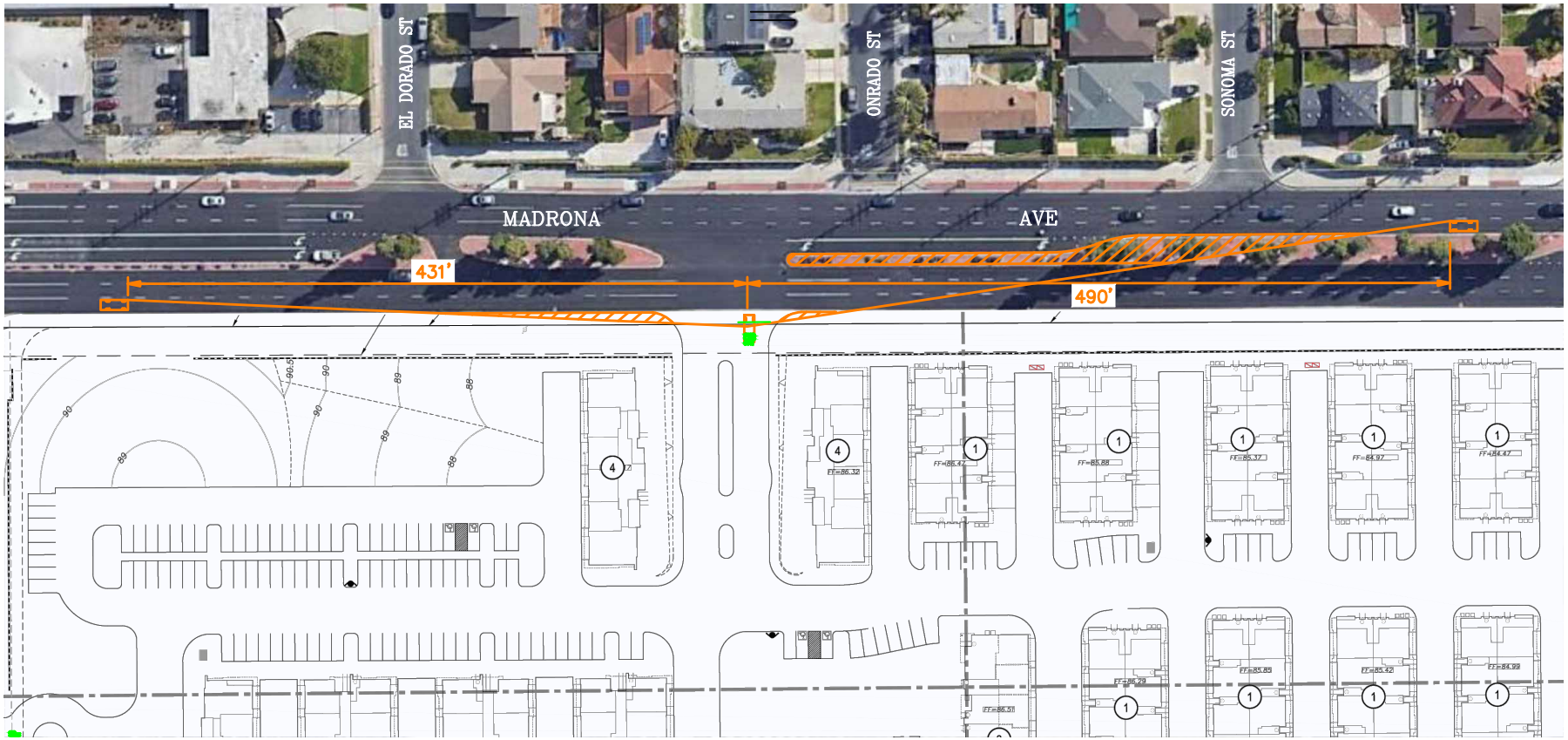
LENNAR DEL AMO, TORRANCE

SIGHT DISTANCE

DESIGN SPEED LIMIT:	40 MPH
REQUIRED CORNER SIGHT DISTANCE LOOKING LEFT:	431 FEET
REQUIRED CORNER SIGHT DISTANCE LOOKING RIGHT:	490 FEET

LEGEND

LIMITED USE AREA: TO ENSURE ADEQUATE SIGHT DISTANCE, HARDSCAPE AND/OR LANDSCAPE SHALL NOT BE HIGHER THAN 30 INCHES. NO FENCES OR WALLS IN LIMITED USE AREA. THE MAXIMUM TREE SIZE AND MINIMUM TREE SPACING IN THE LIMITED USE AREA FOR ALL MAJOR STREETS SHALL BE 24-INCHES CALIPER TREE TRUNKS (MAXIMUM SIZE AT MATURITY) SPACED AT 60-FEET ON CENTER.



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FIGURE 9-3

PROJECT DRIVEWAY B SIGHT DISTANCE ANALYSIS - LEFT TURNING VEHICLES

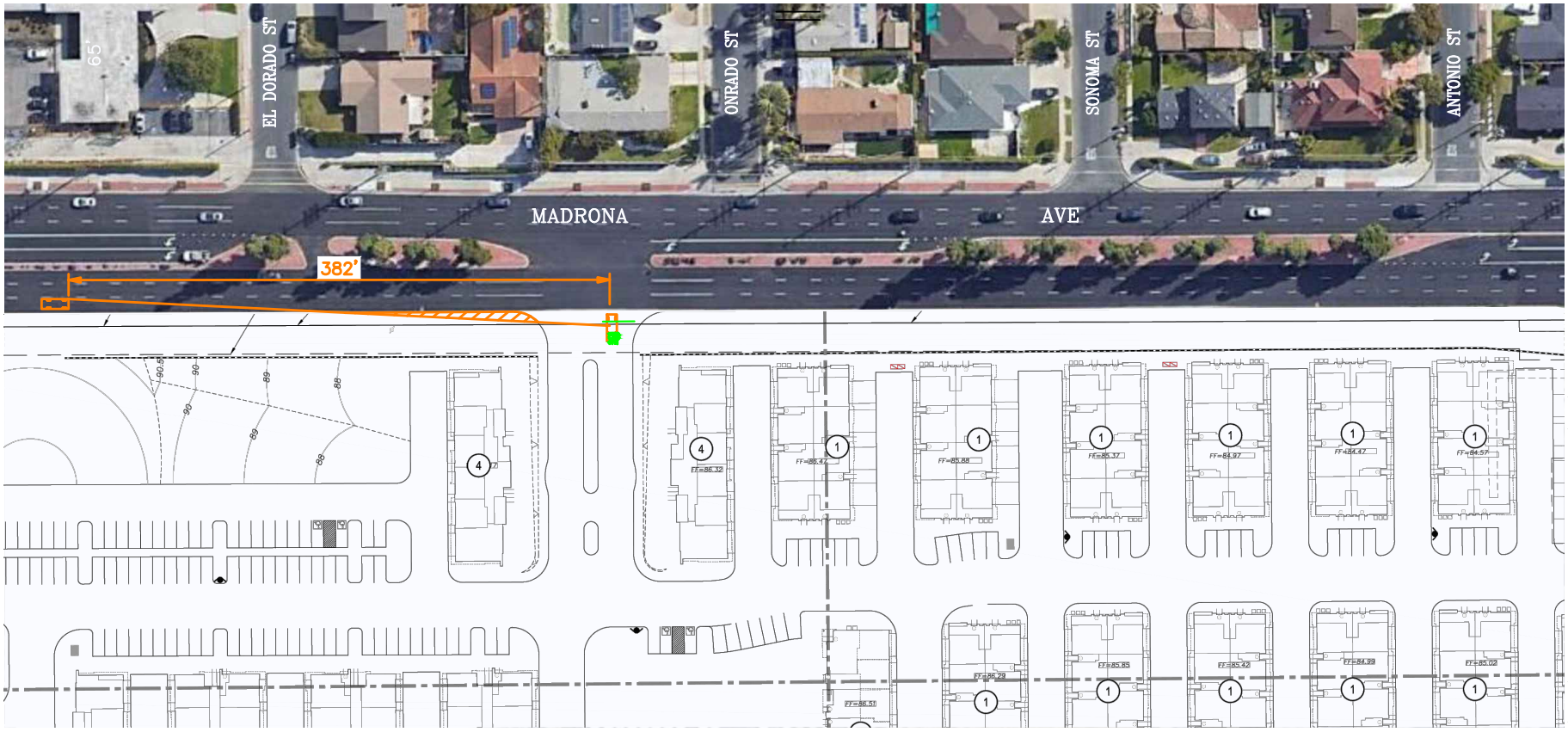
LENNAR DEL AMO, TORRANCE

SIGHT DISTANCE

DESIGN SPEED LIMIT:	40 MPH
REQUIRED CORNER SIGHT DISTANCE LOOKING LEFT:	382 FEET

LEGEND

PUBLIC RIGHT-OF-WAY LIMITED USE AREA: TO ENSURE ADEQUATE SIGHT DISTANCE, HARDSCAPE AND/OR LANDSCAPE SHALL NOT BE HIGHER THAN 30 INCHES ABOVE THE CURB/SIDEWALK. NO FENCES OR WALLS IN LIMITED USE AREA.

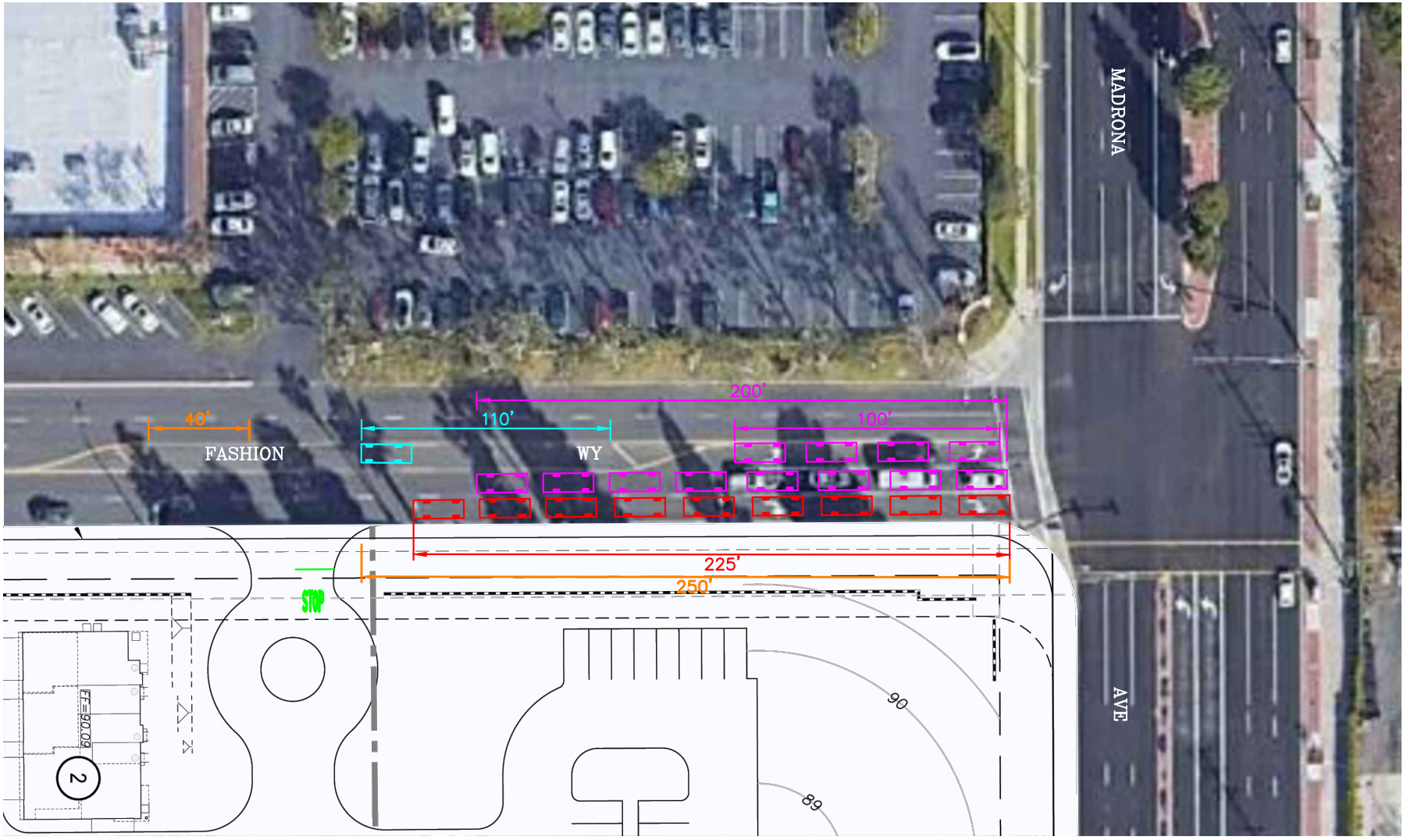


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FIGURE 9-4

PROJECT DRIVEWAY B SIGHT DISTANCE ANALYSIS – RIGHT TURNING VEHICLES

LENNAR DEL AMO, TORRANCE



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KEY

= WESTBOUND LEFT-TURN ONTO DRIVEWAY A

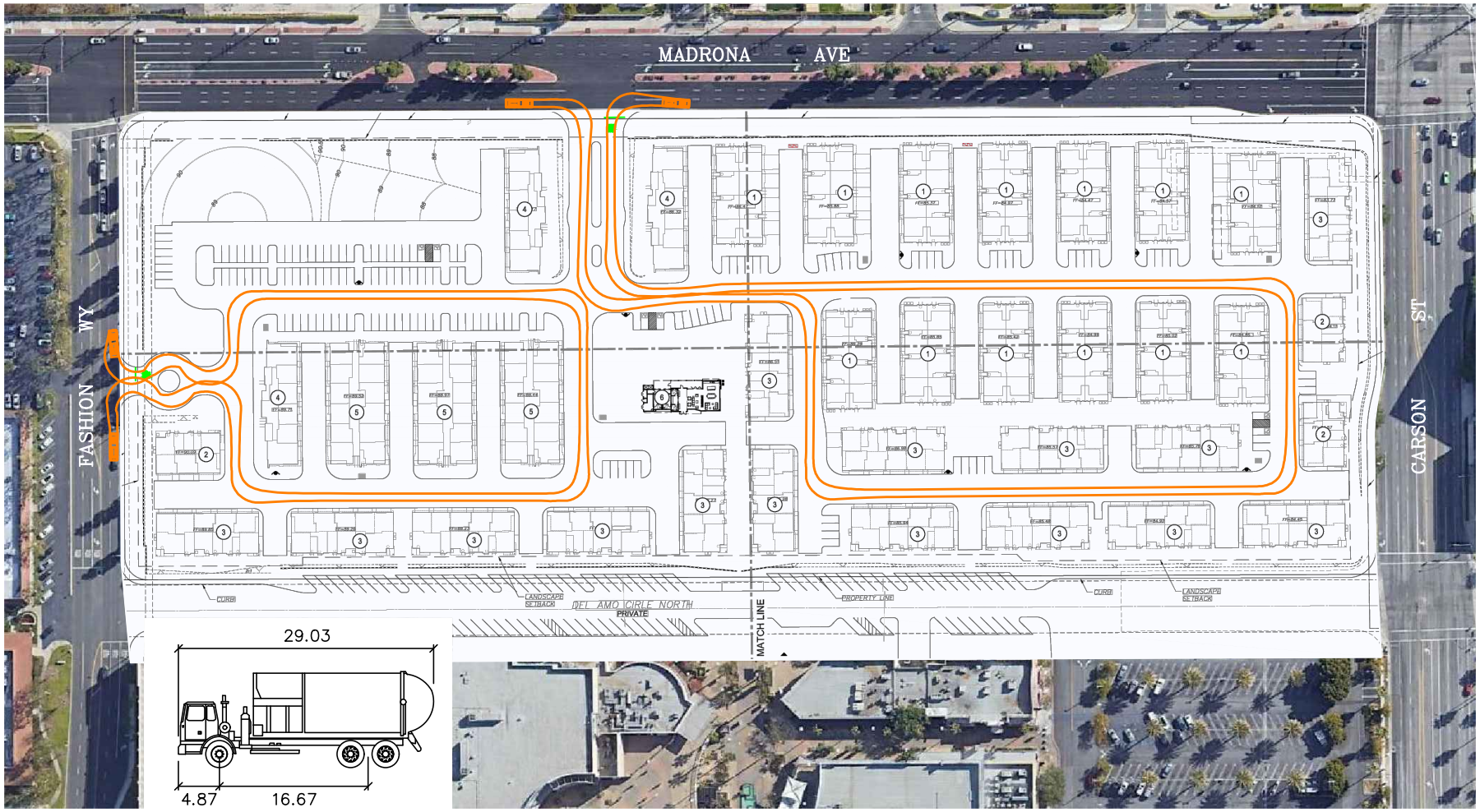
= EASTBOUND LEFT-TURN ONTO MADRONA AVE

= EASTBOUND RIGHT-TURN ONTO MADRONA AVE

FIGURE 9-5

PEAK HOUR MAXIMUM QUEUE

LENNAR DEL AMO, TORRANCE



Refuse

	feet
Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 45.0

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SOURCE: SUMMER/MURPHY & PARTNERS, INC.

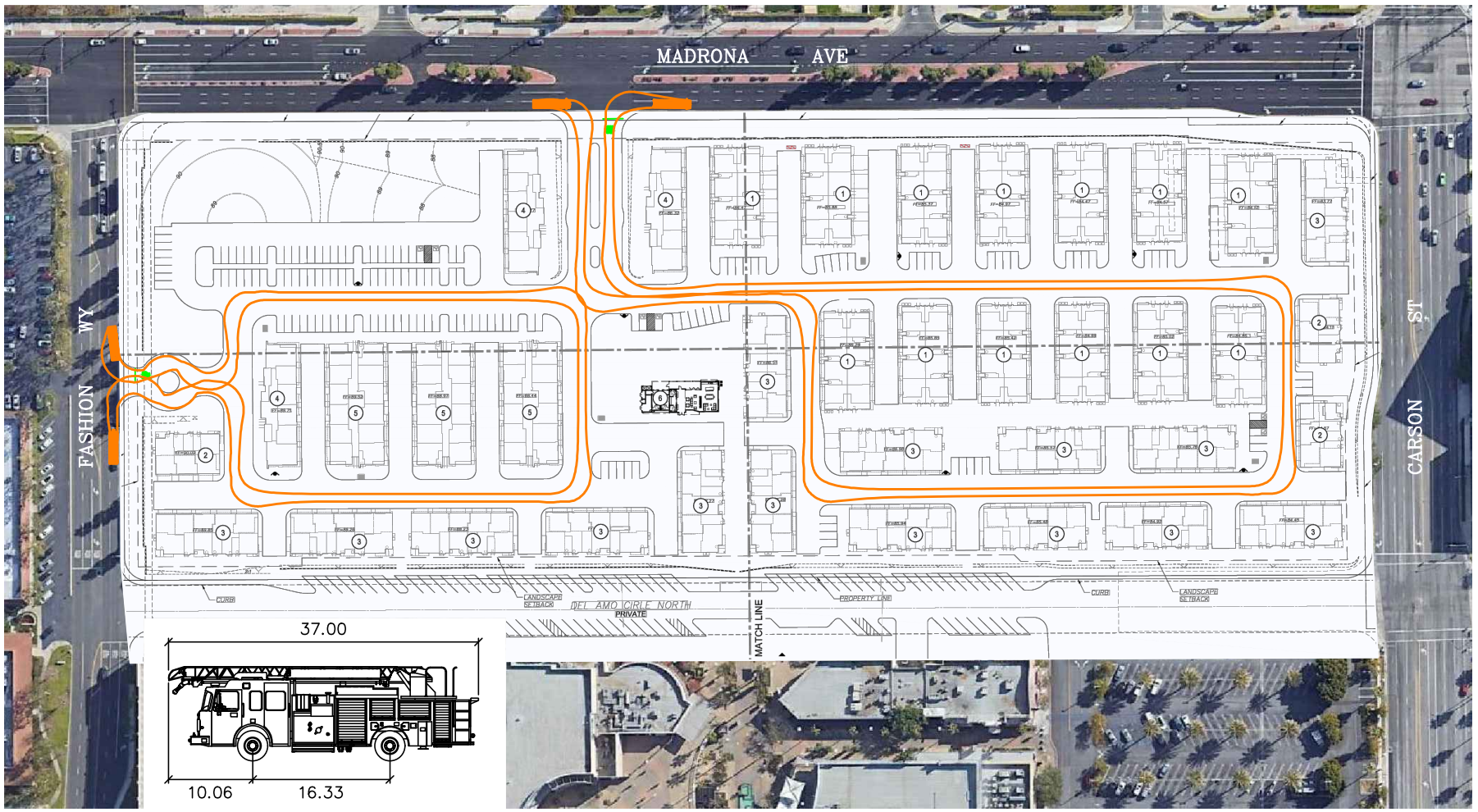
FIGURE 9-6

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TRASH TRUCK TURNING ANALYSIS

LENNAR DEL AMO, TORRANCE



Fire & Rescue

	feet
Width	: 8.33
Track	: 7.88
Lock to Lock Time	: 6.0
Steering Angle	: 48.0

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SOURCE: SUMMER/MURPHY & PARTNERS, INC.

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FIGURE 9-7

FIRE TRUCK TURNING ANALYSIS

LENNAR DEL AMO, TORRANCE

10.0 AREA-WIDE TRAFFIC IMPROVEMENTS

For those intersections where projected traffic volumes are expected to exceed the LOS criteria thresholds, this report recommends traffic improvements that change the intersection geometry to increase capacity. These capacity improvements involve roadway widening and/or re-striping to reconfigure roadways to specific approaches of a key intersection. The identified improvements are expected to improve levels of service at the locations which exceed the LOS criteria thresholds.

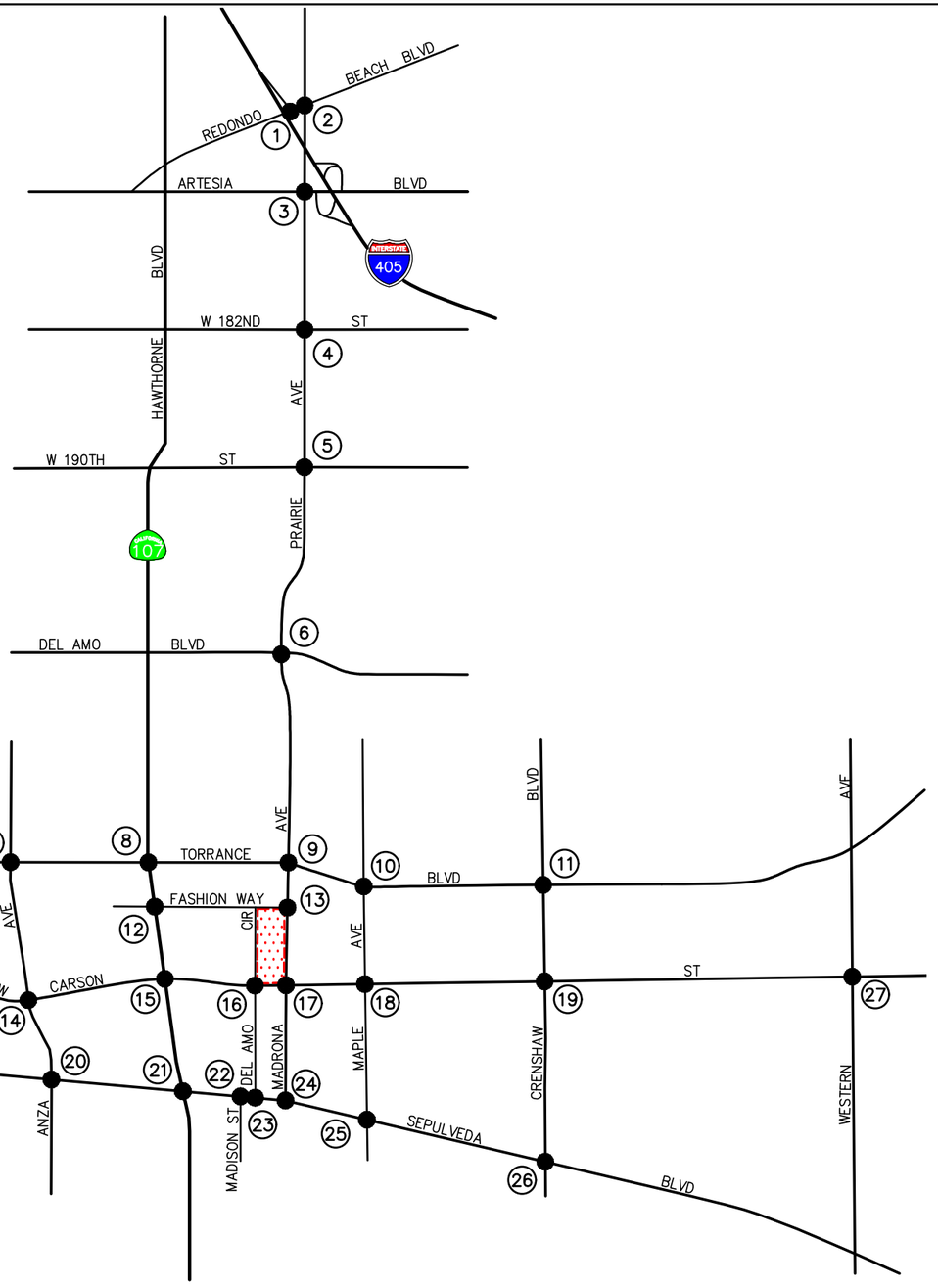
10.1 Recommended Improvements

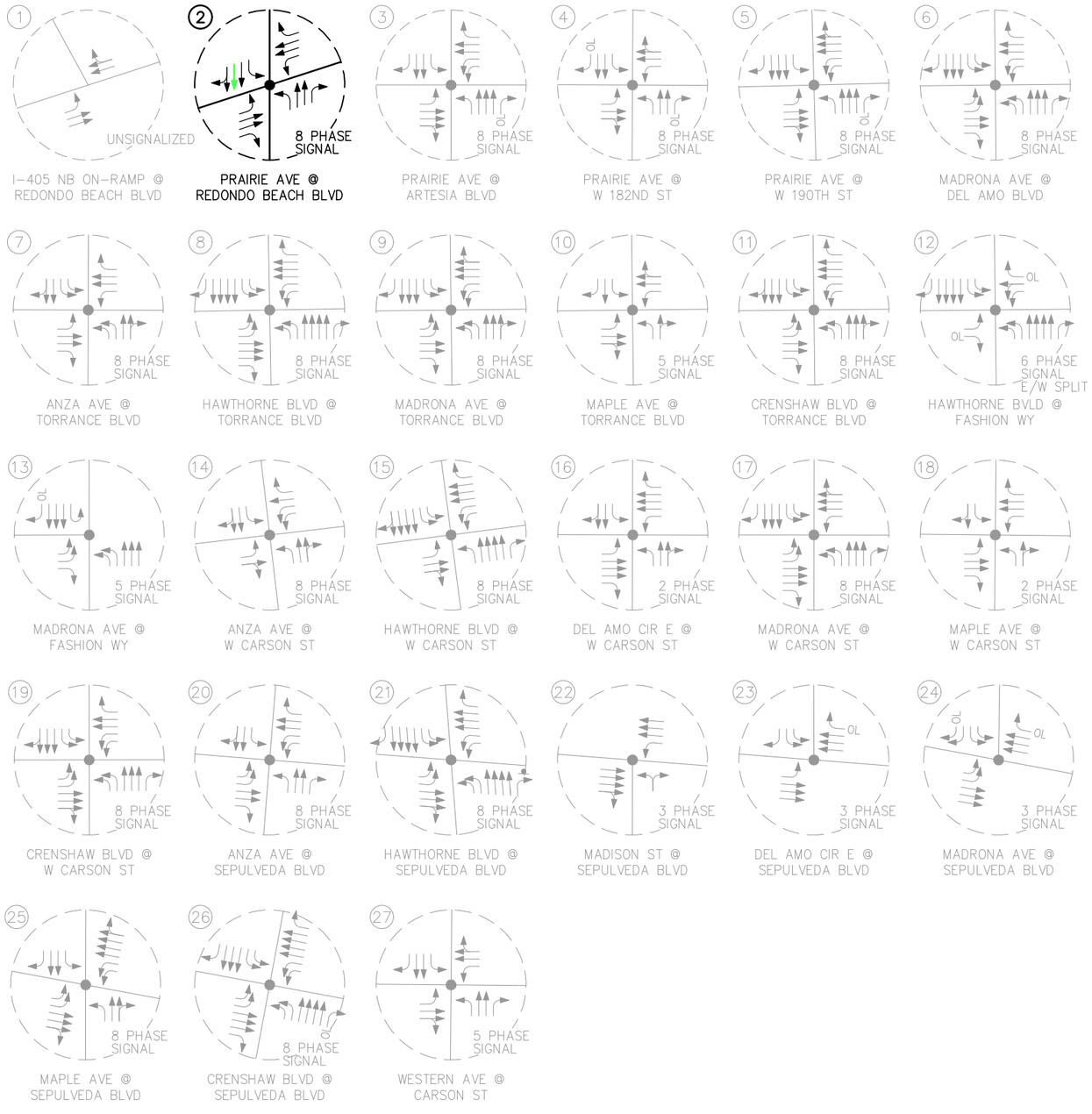
10.1.1 *Existing With Ambient Growth (Year 2028) With Project Traffic Conditions*

The results of the intersection capacity analyses summarized in *Table 7-1* indicates that the Project-related impacts necessitate the implementation of improvements at one (1) study intersection under Existing with Ambient Growth with Project traffic conditions. Subject to the City of Torrance review and concurrence, the Project may be expected to construct the recommended improvements, which are as follows:

- **Intersection 2 – Prairie Avenue at Redondo Beach Boulevard:** Restripe the southbound approach and departure to include an additional through lane. Modify the existing traffic signal as necessary. These improvements are consistent with the City of Torrance Citywide Traffic Analysis prepared by Albert Grover & Associates in March 2019. It should be noted that only a portion of the Torrance Citywide Improvements needed to be implemented to offset the added Project volumes. Implementation of this improvement will require the review/approval of the City of Torrance.

Figure 10-1 presents the recommended improvements for the key study intersection.





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KEY
- = APPROACH LANE ASSIGNMENT
- = YEAR 2028 RECOMMENDED IMPROVEMENTS
- = TRAFFIC SIGNAL
- = PROJECT SITE

FIGURE 10-1

RECOMMENDED TRAFFIC IMPROVEMENTS

LENNAR DEL AMO, TORRANCE

APPENDIX A

EXISTING TRAFFIC COUNT DATA

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Torrance
N/S: I-405 Northbound On Ramp
E/W: Redondo Beach Boulevard
Weather: Clear

File Name : 01_TOR_405N_Redondo AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

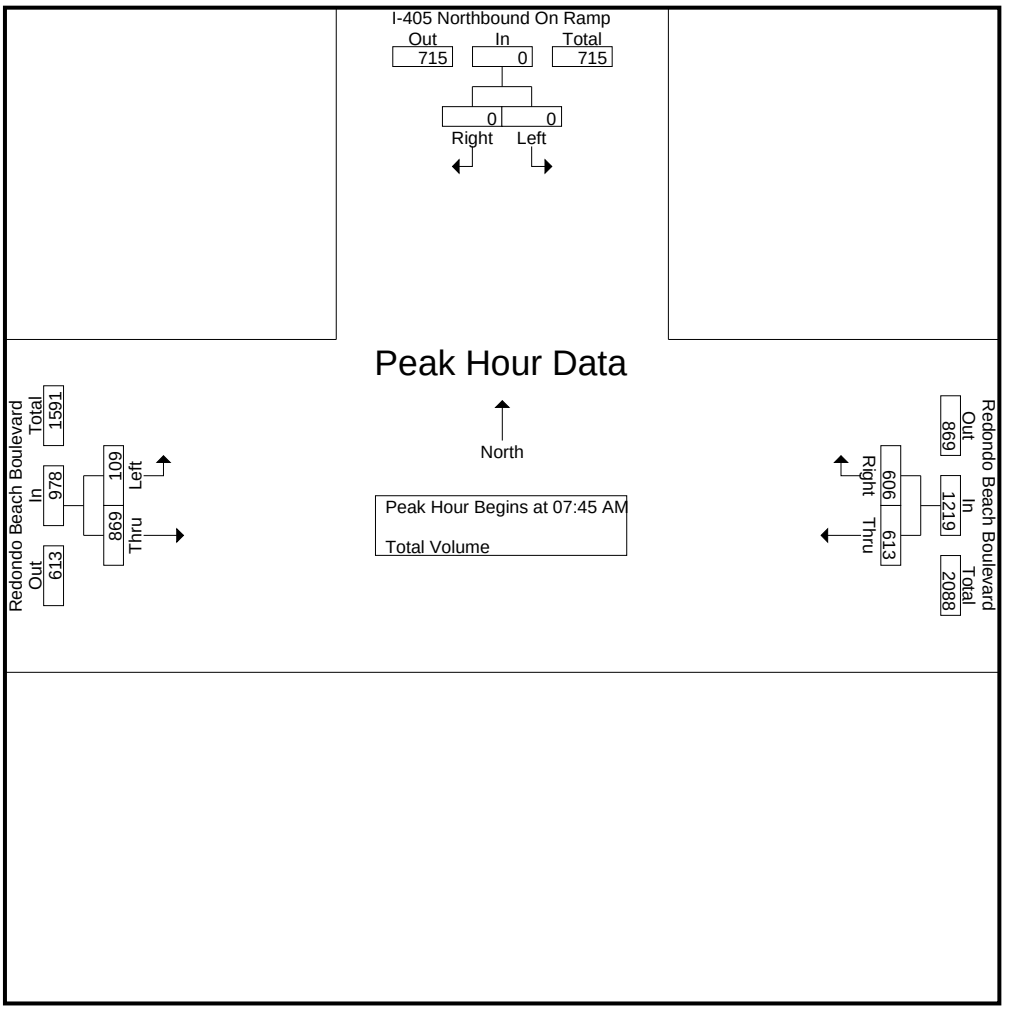
	I-405 Northbound On Ramp Southbound			Redondo Beach Boulevard Westbound			Redondo Beach Boulevard Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
07:00 AM	0	0	0	66	145	211	29	131	160	371
07:15 AM	0	0	0	120	175	295	28	151	179	474
07:30 AM	0	0	0	149	159	308	32	185	217	525
07:45 AM	0	0	0	164	160	324	32	217	249	573
Total	0	0	0	499	639	1138	121	684	805	1943
08:00 AM	0	0	0	151	154	305	29	201	230	535
08:15 AM	0	0	0	145	150	295	23	240	263	558
08:30 AM	0	0	0	153	142	295	25	211	236	531
08:45 AM	0	0	0	154	140	294	43	187	230	524
Total	0	0	0	603	586	1189	120	839	959	2148
Grand Total	0	0	0	1102	1225	2327	241	1523	1764	4091
Apprch %	0	0		47.4	52.6		13.7	86.3		
Total %	0	0	0	26.9	29.9	56.9	5.9	37.2	43.1	

	I-405 Northbound On Ramp Southbound			Redondo Beach Boulevard Westbound			Redondo Beach Boulevard Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	0	0	0	**164**	**160**	**324**	**32**	217	249	**573**
08:00 AM	0	0	0	151	154	305	29	201	230	535
08:15 AM	0	0	0	145	150	295	23	**240**	**263**	558
08:30 AM	0	0	0	153	142	295	25	211	236	531
Total Volume	0	0	0	613	606	1219	109	869	978	2197
% App. Total	0	0		50.3	49.7		11.1	88.9		
PHF	.000	.000	.000	.934	.947	.941	.852	.905	.930	.959

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Torrance
N/S: I-405 Northbound On Ramp
E/W: Redondo Beach Boulevard
Weather: Clear

File Name : 01_TOR_405N_Redondo AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM			07:15 AM			07:45 AM		
+0 mins.	0	0	0	120	**175**	295	**32**	217	249
+15 mins.	0	0	0	149	159	308	29	201	230
+30 mins.	0	0	0	**164**	160	**324**	23	**240**	**263**
+45 mins.	0	0	0	151	154	305	25	211	236
Total Volume	0	0	0	584	648	1232	109	869	978
% App. Total	0	0		47.4	52.6		11.1	88.9	
PHF	.000	.000	.000	.890	.926	.951	.852	.905	.930

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Torrance
N/S: I-405 Northbound On Ramp
E/W: Redondo Beach Boulevard
Weather: Clear

File Name : 01_TOR_405N_Redondo PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

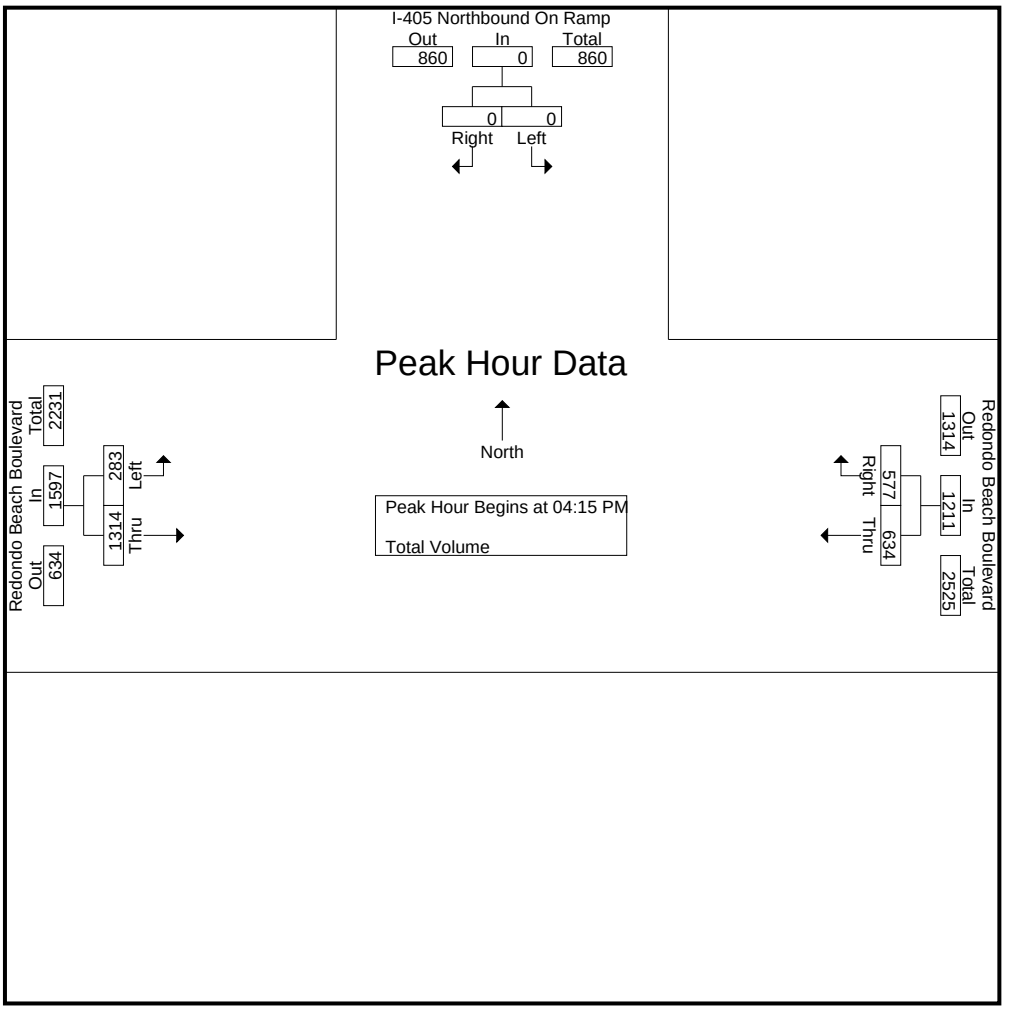
	I-405 Northbound On Ramp Southbound			Redondo Beach Boulevard Westbound			Redondo Beach Boulevard Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
04:00 PM	0	0	0	148	142	290	66	312	378	668
04:15 PM	0	0	0	152	140	292	72	304	376	668
04:30 PM	0	0	0	150	139	289	63	336	399	688
04:45 PM	0	0	0	170	145	315	70	310	380	695
Total	0	0	0	620	566	1186	271	1262	1533	2719
05:00 PM	0	0	0	162	153	315	78	364	442	757
05:15 PM	0	0	0	144	147	291	63	281	344	635
05:30 PM	0	0	0	143	129	272	74	323	397	669
05:45 PM	0	0	0	183	107	290	55	338	393	683
Total	0	0	0	632	536	1168	270	1306	1576	2744
Grand Total	0	0	0	1252	1102	2354	541	2568	3109	5463
Apprch %	0	0		53.2	46.8		17.4	82.6		
Total %	0	0	0	22.9	20.2	43.1	9.9	47	56.9	

	I-405 Northbound On Ramp Southbound			Redondo Beach Boulevard Westbound			Redondo Beach Boulevard Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:15 PM										
04:15 PM	0	0	0	152	140	292	72	304	376	668
04:30 PM	0	0	0	150	139	289	63	336	399	688
04:45 PM	0	0	0	**170**	145	**315**	70	310	380	695
05:00 PM	0	0	0	162	**153**	315	**78**	**364**	**442**	**757**
Total Volume	0	0	0	634	577	1211	283	1314	1597	2808
% App. Total	0	0		52.4	47.6		17.7	82.3		
PHF	.000	.000	.000	.932	.943	.961	.907	.902	.903	.927

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City of Torrance
N/S: I-405 Northbound On Ramp
E/W: Redondo Beach Boulevard
Weather: Clear

File Name : 01_TOR_405N_Redondo PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM			04:15 PM			04:15 PM		
+0 mins.	0	0	0	152	140	292	72	304	376
+15 mins.	0	0	0	150	139	289	63	336	399
+30 mins.	0	0	0	**170**	145	**315**	70	310	380
+45 mins.	0	0	0	162	**153**	315	**78**	**364**	**442**
Total Volume	0	0	0	634	577	1211	283	1314	1597
% App. Total	0	0		52.4	47.6		17.7	82.3	
PHF	.000	.000	.000	.932	.943	.961	.907	.902	.903

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City of Torrance
N/S: Prairie Avenue
E/W: Redondo Beach Boulevard
Weather: Clear

File Name : 02_TOR_Prairie_Redondo AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

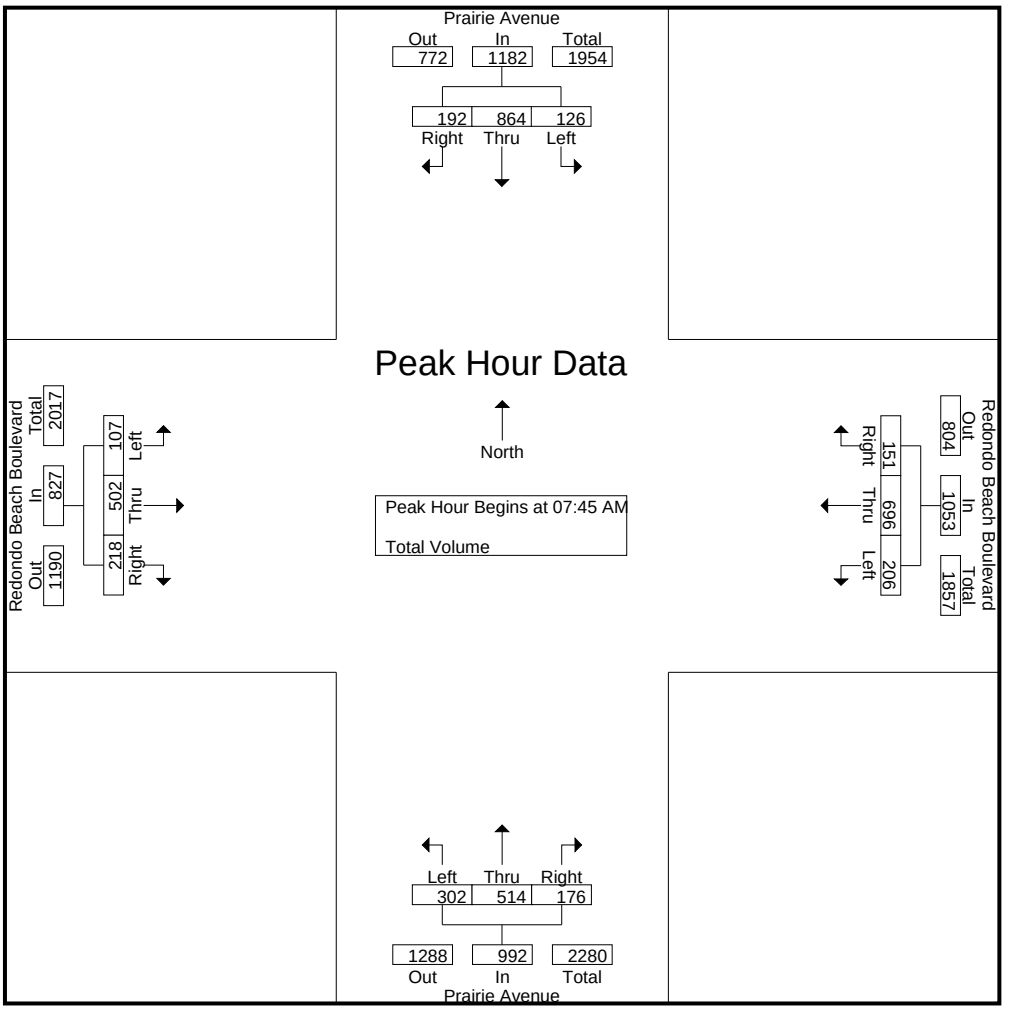
	Prairie Avenue Southbound				Redondo Beach Boulevard Westbound				Prairie Avenue Northbound				Redondo Beach Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	12	118	31	161	25	111	18	154	67	97	25	189	22	81	34	137	641
07:15 AM	27	175	41	243	62	175	29	266	78	115	29	222	11	85	51	147	878
07:30 AM	50	195	40	285	43	193	38	274	71	131	53	255	18	121	46	185	999
07:45 AM	35	215	57	307	58	191	40	289	74	162	55	291	24	114	57	195	1082
Total	124	703	169	996	188	670	125	983	290	505	162	957	75	401	188	664	3600
08:00 AM	28	186	43	257	49	175	43	267	76	135	42	253	34	118	49	201	978
08:15 AM	35	220	52	307	52	159	29	240	71	103	38	212	28	139	67	234	993
08:30 AM	28	243	40	311	47	171	39	257	81	114	41	236	21	131	45	197	1001
08:45 AM	34	167	38	239	59	175	37	271	79	137	55	271	25	124	54	203	984
Total	125	816	173	1114	207	680	148	1035	307	489	176	972	108	512	215	835	3956
Grand Total	249	1519	342	2110	395	1350	273	2018	597	994	338	1929	183	913	403	1499	7556
Apprch %	11.8	72	16.2		19.6	66.9	13.5		30.9	51.5	17.5		12.2	60.9	26.9		
Total %	3.3	20.1	4.5	27.9	5.2	17.9	3.6	26.7	7.9	13.2	4.5	25.5	2.4	12.1	5.3	19.8	

	Prairie Avenue Southbound				Redondo Beach Boulevard Westbound				Prairie Avenue Northbound				Redondo Beach Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**35**	215	**57**	307	**58**	**191**	40	**289**	74	**162**	**55**	**291**	24	114	57	195	**1082**
08:00 AM	28	186	43	257	49	175	**43**	267	76	135	42	253	**34**	118	49	201	978
08:15 AM	35	220	52	307	52	159	29	240	71	103	38	212	28	**139**	**67**	**234**	993
08:30 AM	28	**243**	40	**311**	47	171	39	257	**81**	114	41	236	21	131	45	197	1001
Total Volume	126	864	192	1182	206	696	151	1053	302	514	176	992	107	502	218	827	4054
% App. Total	10.7	73.1	16.2		19.6	66.1	14.3		30.4	51.8	17.7		12.9	60.7	26.4		
PHF	.900	.889	.842	.950	.888	.911	.878	.911	.932	.793	.800	.852	.787	.903	.813	.884	.937

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City of Torrance
N/S: Prairie Avenue
E/W: Redondo Beach Boulevard
Weather: Clear

File Name : 02_TOR_Prairie_Redondo AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				07:15 AM				07:15 AM				08:00 AM			
+0 mins.	**35**	215	**57**	307	**62**	175	29	266	**78**	115	29	222	**34**	118	49	201
+15 mins.	28	186	43	257	43	**193**	38	274	71	131	53	255	28	**139**	**67**	**234**
+30 mins.	35	220	52	307	58	191	40	**289**	74	**162**	**55**	**291**	21	131	45	197
+45 mins.	28	**243**	40	**311**	49	175	**43**	267	76	135	42	253	25	124	54	203
Total Volume	126	864	192	1182	212	734	150	1096	299	543	179	1021	108	512	215	835
% App. Total	10.7	73.1	16.2		19.3	67	13.7		29.3	53.2	17.5		12.9	61.3	25.7	
PHF	.900	.889	.842	.950	.855	.951	.872	.948	.958	.838	.814	.877	.794	.921	.802	.892

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City of Torrance
N/S: Prairie Avenue
E/W: Redondo Beach Boulevard
Weather: Clear

File Name : 02_TOR_Prairie_Redondo PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

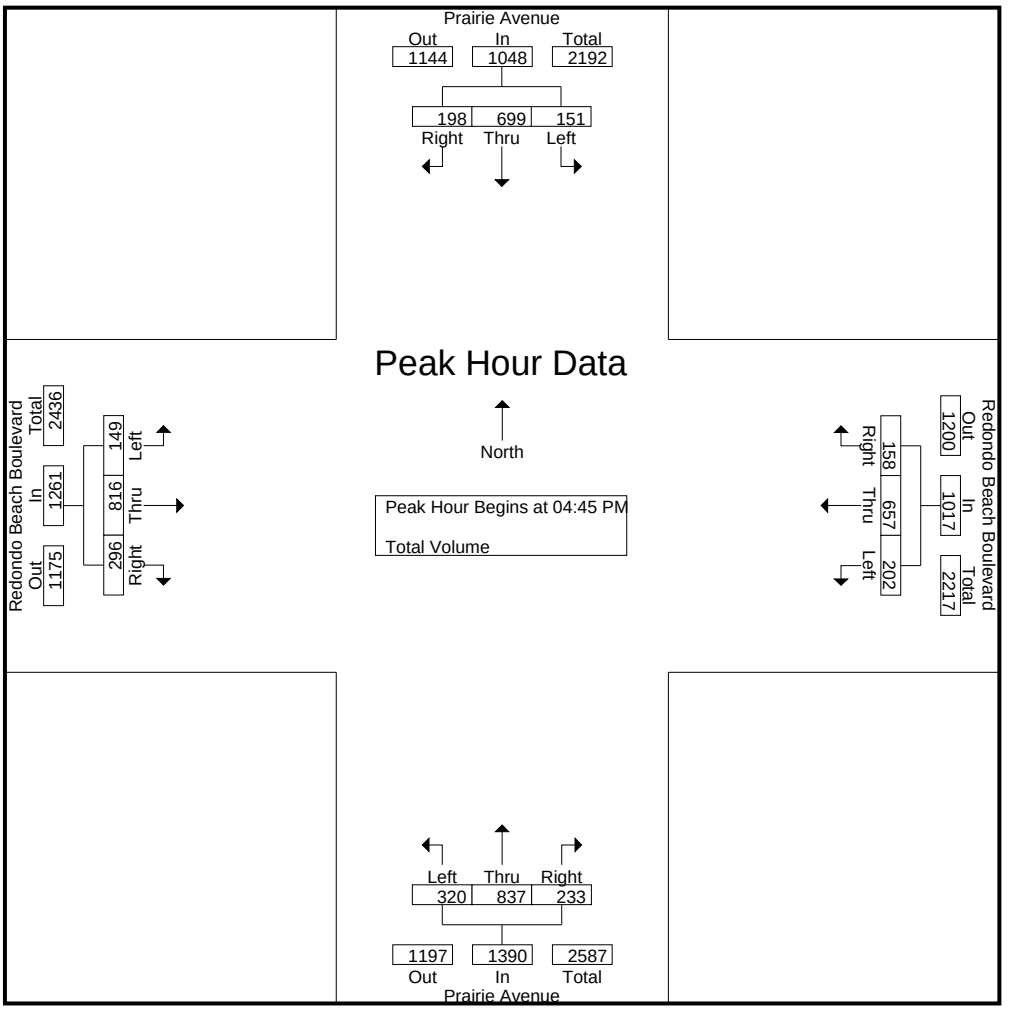
	Prairie Avenue Southbound				Redondo Beach Boulevard Westbound				Prairie Avenue Northbound				Redondo Beach Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	51	164	64	279	46	145	32	223	77	210	81	368	33	178	82	293	1163
04:15 PM	44	166	48	258	52	164	41	257	80	164	41	285	42	194	71	307	1107
04:30 PM	39	144	48	231	46	146	33	225	93	203	57	353	28	231	75	334	1143
04:45 PM	38	187	72	297	52	168	30	250	79	215	56	350	39	191	67	297	1194
Total	172	661	232	1065	196	623	136	955	329	792	235	1356	142	794	295	1231	4607
05:00 PM	38	162	32	232	38	194	45	277	77	175	51	303	36	243	87	366	1178
05:15 PM	34	190	50	274	54	147	46	247	89	236	66	391	31	181	56	268	1180
05:30 PM	41	160	44	245	58	148	37	243	75	211	60	346	43	201	86	330	1164
05:45 PM	42	119	47	208	52	181	38	271	57	163	66	286	44	216	89	349	1114
Total	155	631	173	959	202	670	166	1038	298	785	243	1326	154	841	318	1313	4636
Grand Total	327	1292	405	2024	398	1293	302	1993	627	1577	478	2682	296	1635	613	2544	9243
Apprch %	16.2	63.8	20		20	64.9	15.2		23.4	58.8	17.8		11.6	64.3	24.1		
Total %	3.5	14	4.4	21.9	4.3	14	3.3	21.6	6.8	17.1	5.2	29	3.2	17.7	6.6	27.5	

	Prairie Avenue Southbound				Redondo Beach Boulevard Westbound				Prairie Avenue Northbound				Redondo Beach Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	38	187	**72**	**297**	52	168	30	250	79	215	56	350	39	191	67	297	**1194**
05:00 PM	38	162	32	232	38	**194**	45	**277**	77	175	51	303	36	**243**	**87**	**366**	1178
05:15 PM	34	**190**	50	274	54	147	**46**	247	**89**	**236**	**66**	**391**	31	181	56	268	1180
05:30 PM	**41**	160	44	245	**58**	148	37	243	75	211	60	346	**43**	201	86	330	1164
Total Volume	151	699	198	1048	202	657	158	1017	320	837	233	1390	149	816	296	1261	4716
% App. Total	14.4	66.7	18.9		19.9	64.6	15.5		23	60.2	16.8		11.8	64.7	23.5		
PHF	.921	.920	.688	.882	.871	.847	.859	.918	.899	.887	.883	.889	.866	.840	.851	.861	.987

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City of Torrance
N/S: Prairie Avenue
E/W: Redondo Beach Boulevard
Weather: Clear

File Name : 02_TOR_Prairie_Redondo PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				05:00 PM				04:30 PM				05:00 PM			
+0 mins.	**51**	164	64	279	38	**194**	45	**277**	**93**	203	57	353	36	**243**	87	**366**
+15 mins.	44	166	48	258	54	147	**46**	247	79	215	56	350	31	181	56	268
+30 mins.	39	144	48	231	**58**	148	37	243	77	175	51	303	43	201	86	330
+45 mins.	38	**187**	**72**	**297**	52	181	38	271	89	**236**	**66**	**391**	**44**	216	**89**	349
Total Volume	172	661	232	1065	202	670	166	1038	338	829	230	1397	154	841	318	1313
% App. Total	16.2	62.1	21.8		19.5	64.5	16		24.2	59.3	16.5		11.7	64.1	24.2	
PHF	.843	.884	.806	.896	.871	.863	.902	.937	.909	.878	.871	.893	.875	.865	.893	.897

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City of Torrance
N/S: Prairie Avenue
E/W: Artesia Boulevard
Weather: Clear

File Name : 03_TOR_Prairie_Artesia AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

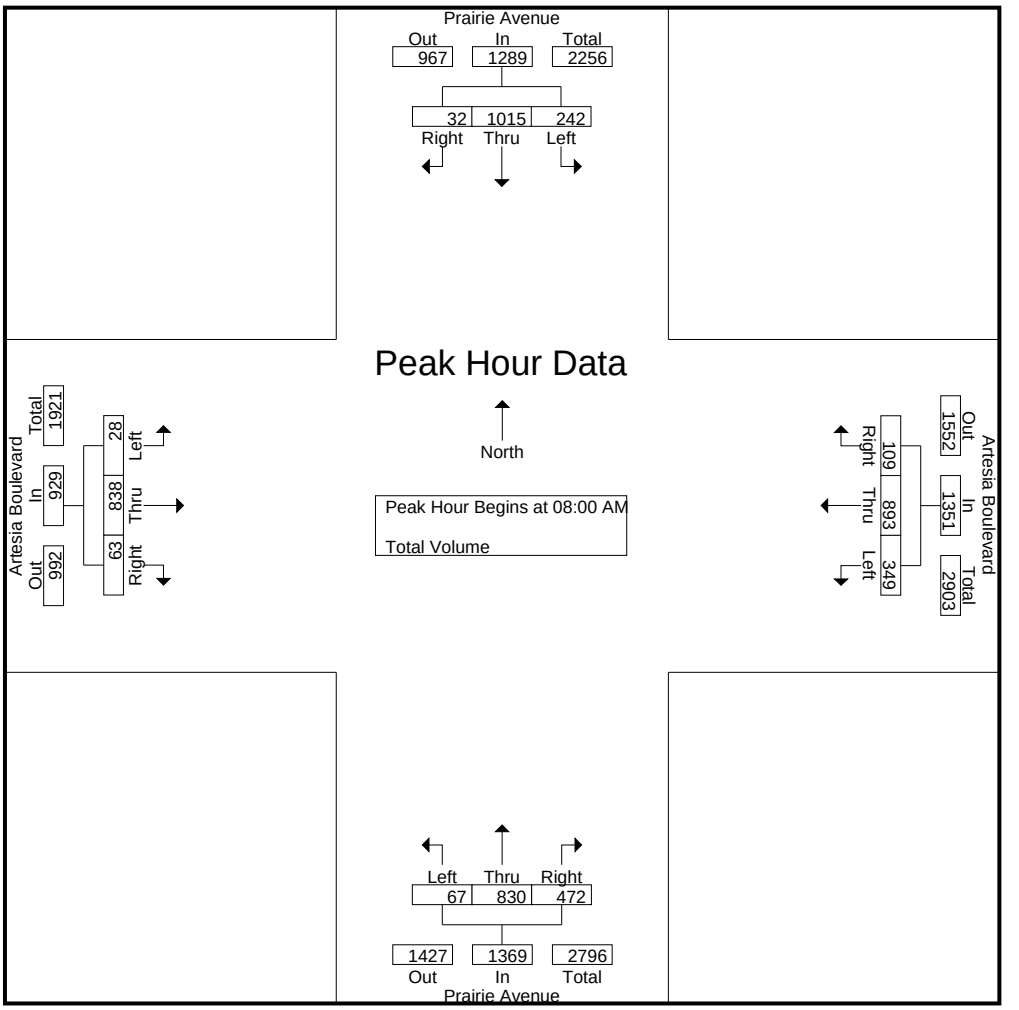
	Prairie Avenue Southbound				Artesia Boulevard Westbound				Prairie Avenue Northbound				Artesia Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	59	129	6	194	41	181	26	248	7	171	106	284	4	141	8	153	879
07:15 AM	59	198	4	261	42	190	23	255	12	196	73	281	4	198	3	205	1002
07:30 AM	56	246	4	306	71	211	38	320	12	219	91	322	7	158	6	171	1119
07:45 AM	50	265	7	322	75	218	31	324	16	239	107	362	9	159	12	180	1188
Total	224	838	21	1083	229	800	118	1147	47	825	377	1249	24	656	29	709	4188
08:00 AM	61	226	5	292	54	216	29	299	20	187	95	302	8	217	21	246	1139
08:15 AM	60	262	5	327	81	218	25	324	13	176	108	297	9	219	22	250	1198
08:30 AM	62	286	11	359	95	227	26	348	20	240	125	385	3	191	9	203	1295
08:45 AM	59	241	11	311	119	232	29	380	14	227	144	385	8	211	11	230	1306
Total	242	1015	32	1289	349	893	109	1351	67	830	472	1369	28	838	63	929	4938
Grand Total	466	1853	53	2372	578	1693	227	2498	114	1655	849	2618	52	1494	92	1638	9126
Apprch %	19.6	78.1	2.2		23.1	67.8	9.1		4.4	63.2	32.4		3.2	91.2	5.6		
Total %	5.1	20.3	0.6	26	6.3	18.6	2.5	27.4	1.2	18.1	9.3	28.7	0.6	16.4	1	17.9	

	Prairie Avenue Southbound				Artesia Boulevard Westbound				Prairie Avenue Northbound				Artesia Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	61	226	5	292	54	216	**29**	299	**20**	187	95	302	8	217	21	246	1139
08:15 AM	60	262	5	327	81	218	25	324	13	176	108	297	**9**	**219**	**22**	**250**	1198
08:30 AM	**62**	**286**	**11**	**359**	95	227	26	348	20	**240**	125	**385**	3	191	9	203	1295
08:45 AM	59	241	11	311	**119**	**232**	29	**380**	14	227	**144**	385	8	211	11	230	**1306**
Total Volume	242	1015	32	1289	349	893	109	1351	67	830	472	1369	28	838	63	929	4938
% App. Total	18.8	78.7	2.5		25.8	66.1	8.1		4.9	60.6	34.5		3	90.2	6.8		
PHF	.976	.887	.727	.898	.733	.962	.940	.889	.838	.865	.819	.889	.778	.957	.716	.929	.945

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City of Torrance
N/S: Prairie Avenue
E/W: Artesia Boulevard
Weather: Clear

File Name : 03_TOR_Prairie_Artesia AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	50	265	7	322	54	216	**29**	299	**20**	187	95	302	8	217	21	246
+15 mins.	61	226	5	292	81	218	25	324	13	176	108	297	**9**	**219**	**22**	**250**
+30 mins.	60	262	5	327	95	227	26	348	20	**240**	125	**385**	3	191	9	203
+45 mins.	**62**	**286**	**11**	**359**	**119**	**232**	29	**380**	14	227	**144**	385	8	211	11	230
Total Volume	233	1039	28	1300	349	893	109	1351	67	830	472	1369	28	838	63	929
% App. Total	17.9	79.9	2.2		25.8	66.1	8.1		4.9	60.6	34.5		3	90.2	6.8	
PHF	.940	.908	.636	.905	.733	.962	.940	.889	.838	.865	.819	.889	.778	.957	.716	.929

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City of Torrance
N/S: Prairie Avenue
E/W: Artesia Boulevard
Weather: Clear

File Name : 03_TOR_Prairie_Artesia PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

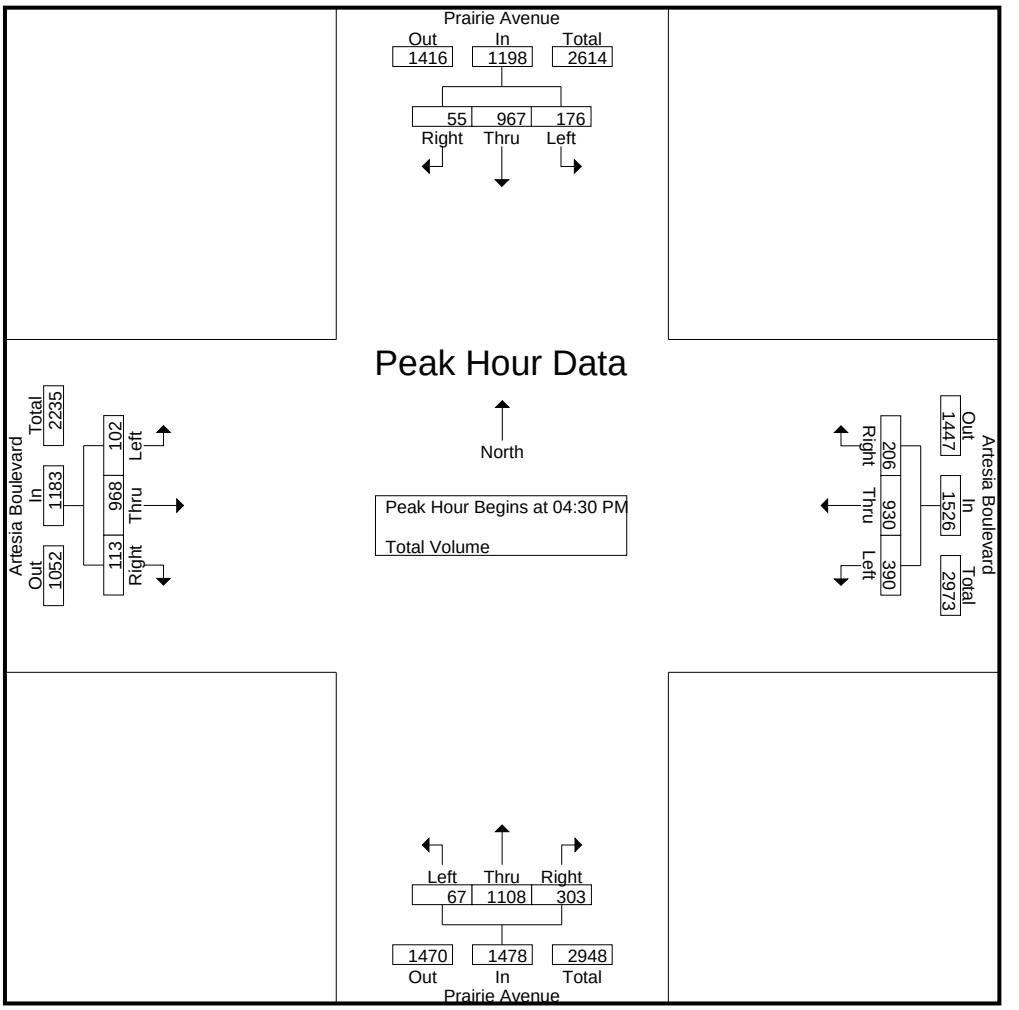
	Prairie Avenue Southbound				Artesia Boulevard Westbound				Prairie Avenue Northbound				Artesia Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	23	263	8	294	89	198	65	352	21	262	65	348	27	273	23	323	1317
04:15 PM	33	270	14	317	90	189	31	310	19	282	73	374	28	213	21	262	1263
04:30 PM	34	228	12	274	96	244	37	377	19	280	81	380	27	290	32	349	1380
04:45 PM	47	254	13	314	115	249	61	425	18	284	75	377	22	235	29	286	1402
Total	137	1015	47	1199	390	880	194	1464	77	1108	294	1479	104	1011	105	1220	5362
05:00 PM	63	244	17	324	79	215	47	341	17	274	84	375	18	196	25	239	1279
05:15 PM	32	241	13	286	100	222	61	383	13	270	63	346	35	247	27	309	1324
05:30 PM	46	264	17	327	90	224	50	364	16	300	58	374	25	212	25	262	1327
05:45 PM	30	227	5	262	89	220	66	375	16	227	78	321	34	244	33	311	1269
Total	171	976	52	1199	358	881	224	1463	62	1071	283	1416	112	899	110	1121	5199
Grand Total	308	1991	99	2398	748	1761	418	2927	139	2179	577	2895	216	1910	215	2341	10561
Apprch %	12.8	83	4.1		25.6	60.2	14.3		4.8	75.3	19.9		9.2	81.6	9.2		
Total %	2.9	18.9	0.9	22.7	7.1	16.7	4	27.7	1.3	20.6	5.5	27.4	2	18.1	2	22.2	

	Prairie Avenue Southbound				Artesia Boulevard Westbound				Prairie Avenue Northbound				Artesia Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	34	228	12	274	96	244	37	377	**19**	280	81	**380**	27	**290**	**32**	**349**	1380
04:45 PM	47	**254**	13	314	**115**	**249**	**61**	**425**	18	**284**	75	377	22	235	29	286	**1402**
05:00 PM	**63**	244	**17**	**324**	79	215	47	341	17	274	**84**	375	18	196	25	239	1279
05:15 PM	32	241	13	286	100	222	61	383	13	270	63	346	**35**	247	27	309	1324
Total Volume	176	967	55	1198	390	930	206	1526	67	1108	303	1478	102	968	113	1183	5385
% App. Total	14.7	80.7	4.6		25.6	60.9	13.5		4.5	75	20.5		8.6	81.8	9.6		
PHF	.698	.952	.809	.924	.848	.934	.844	.898	.882	.975	.902	.972	.729	.834	.883	.847	.960

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City of Torrance
N/S: Prairie Avenue
E/W: Artesia Boulevard
Weather: Clear

File Name : 03_TOR_Prairie_Artesia PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:30 PM				04:15 PM				04:00 PM			
+0 mins.	47	254	13	314	96	244	37	377	**19**	282	73	374	27	273	23	323
+15 mins.	**63**	244	**17**	324	**115**	**249**	**61**	**425**	19	280	81	**380**	**28**	213	21	262
+30 mins.	32	241	13	286	79	215	47	341	18	**284**	75	377	27	**290**	**32**	**349**
+45 mins.	46	**264**	17	**327**	100	222	61	383	17	274	**84**	375	22	235	29	286
Total Volume	188	1003	60	1251	390	930	206	1526	73	1120	313	1506	104	1011	105	1220
% App. Total	15	80.2	4.8		25.6	60.9	13.5		4.8	74.4	20.8		8.5	82.9	8.6	
PHF	.746	.950	.882	.956	.848	.934	.844	.898	.961	.986	.932	.991	.929	.872	.820	.874

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City of Torrance
N/S: Prairie Avenue
E/W: West 182nd Street
Weather: Clear

File Name : 04_TOR_Prairie_W 182nd AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

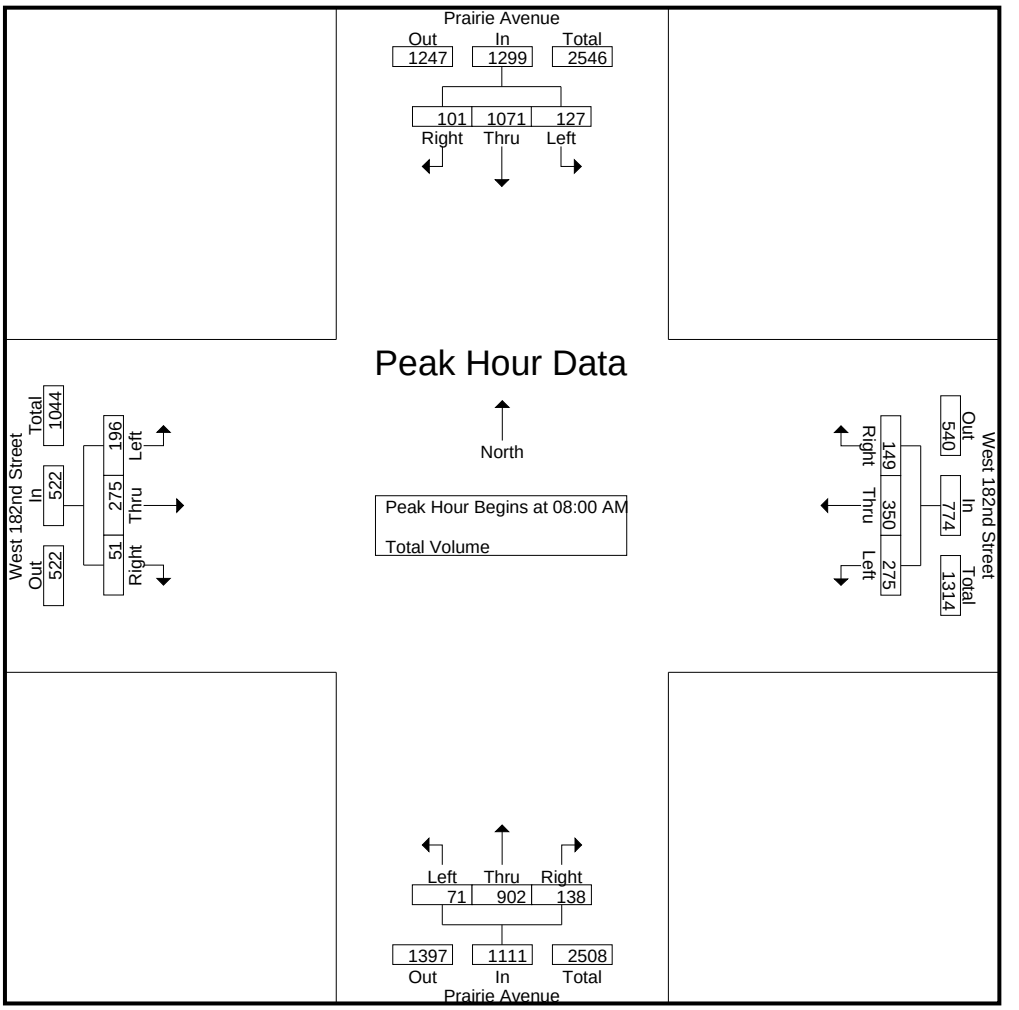
	Prairie Avenue Southbound				West 182nd Street Westbound				Prairie Avenue Northbound				West 182nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	7	184	12	203	21	46	17	84	11	180	10	201	34	29	3	66	554
07:15 AM	9	217	11	237	34	66	17	117	9	225	13	247	33	22	6	61	662
07:30 AM	13	255	17	285	42	71	13	126	15	236	25	276	43	30	13	86	773
07:45 AM	10	345	22	377	34	63	20	117	18	254	23	295	35	44	19	98	887
Total	39	1001	62	1102	131	246	67	444	53	895	71	1019	145	125	41	311	2876
08:00 AM	14	232	18	264	63	61	16	140	9	203	20	232	37	49	14	100	736
08:15 AM	36	279	18	333	65	68	25	158	11	221	35	267	37	54	10	101	859
08:30 AM	42	267	23	332	75	98	55	228	16	221	45	282	69	107	9	185	1027
08:45 AM	35	293	42	370	72	123	53	248	35	257	38	330	53	65	18	136	1084
Total	127	1071	101	1299	275	350	149	774	71	902	138	1111	196	275	51	522	3706
Grand Total	166	2072	163	2401	406	596	216	1218	124	1797	209	2130	341	400	92	833	6582
Apprch %	6.9	86.3	6.8		33.3	48.9	17.7		5.8	84.4	9.8		40.9	48	11		
Total %	2.5	31.5	2.5	36.5	6.2	9.1	3.3	18.5	1.9	27.3	3.2	32.4	5.2	6.1	1.4	12.7	

	Prairie Avenue Southbound				West 182nd Street Westbound				Prairie Avenue Northbound				West 182nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	14	232	18	264	63	61	16	140	9	203	20	232	37	49	14	100	736
08:15 AM	36	279	18	333	65	68	25	158	11	221	35	267	37	54	10	101	859
08:30 AM	**42**	267	23	332	**75**	98	**55**	228	16	221	**45**	282	**69**	**107**	9	**185**	1027
08:45 AM	35	**293**	**42**	**370**	72	**123**	53	**248**	**35**	**257**	38	**330**	53	65	**18**	136	**1084**
Total Volume	127	1071	101	1299	275	350	149	774	71	902	138	1111	196	275	51	522	3706
% App. Total	9.8	82.4	7.8		35.5	45.2	19.3		6.4	81.2	12.4		37.5	52.7	9.8		
PHF	.756	.914	.601	.878	.917	.711	.677	.780	.507	.877	.767	.842	.710	.643	.708	.705	.855

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City of Torrance
N/S: Prairie Avenue
E/W: West 182nd Street
Weather: Clear

File Name : 04_TOR_Prairie_W 182nd AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	10	**345**	22	**377**	63	61	16	140	9	203	20	232	37	49	14	100
+15 mins.	14	232	18	264	65	68	25	158	11	221	35	267	37	54	10	101
+30 mins.	36	279	18	333	**75**	98	**55**	228	16	221	**45**	282	**69**	**107**	9	**185**
+45 mins.	**42**	267	**23**	332	72	**123**	53	**248**	**35**	**257**	38	**330**	53	65	**18**	136
Total Volume	102	1123	81	1306	275	350	149	774	71	902	138	1111	196	275	51	522
% App. Total	7.8	86	6.2		35.5	45.2	19.3		6.4	81.2	12.4		37.5	52.7	9.8	
PHF	.607	.814	.880	.866	.917	.711	.677	.780	.507	.877	.767	.842	.710	.643	.708	.705

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City of Torrance
N/S: Prairie Avenue
E/W: West 182nd Street
Weather: Clear

File Name : 04_TOR_Prairie_W 182nd PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

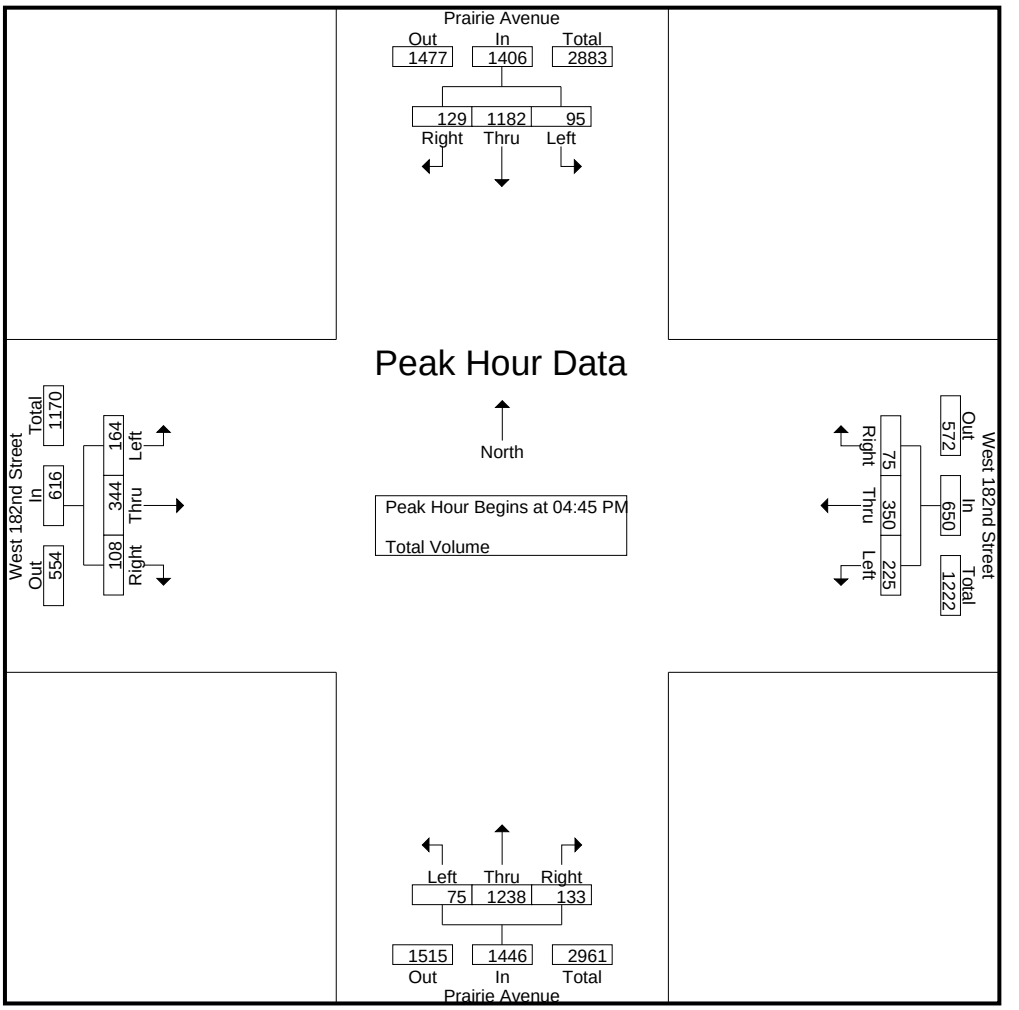
	Prairie Avenue Southbound				West 182nd Street Westbound				Prairie Avenue Northbound				West 182nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	24	252	22	298	61	84	20	165	23	260	30	313	56	103	34	193	969
04:15 PM	19	335	21	375	45	100	19	164	16	322	43	381	42	76	23	141	1061
04:30 PM	10	259	33	302	48	80	14	142	18	277	37	332	55	97	30	182	958
04:45 PM	31	319	30	380	51	86	18	155	17	312	33	362	43	88	28	159	1056
Total	84	1165	106	1355	205	350	71	626	74	1171	143	1388	196	364	115	675	4044
05:00 PM	18	267	32	317	52	94	24	170	21	294	38	353	50	101	36	187	1027
05:15 PM	26	327	35	388	63	73	23	159	19	338	30	387	40	76	16	132	1066
05:30 PM	20	269	32	321	59	97	10	166	18	294	32	344	31	79	28	138	969
05:45 PM	16	340	36	392	53	74	14	141	21	299	25	345	27	79	15	121	999
Total	80	1203	135	1418	227	338	71	636	79	1225	125	1429	148	335	95	578	4061
Grand Total	164	2368	241	2773	432	688	142	1262	153	2396	268	2817	344	699	210	1253	8105
Apprch %	5.9	85.4	8.7		34.2	54.5	11.3		5.4	85.1	9.5		27.5	55.8	16.8		
Total %	2	29.2	3	34.2	5.3	8.5	1.8	15.6	1.9	29.6	3.3	34.8	4.2	8.6	2.6	15.5	

	Prairie Avenue Southbound				West 182nd Street Westbound				Prairie Avenue Northbound				West 182nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**31**	319	30	380	51	86	18	155	17	312	33	362	43	88	28	159	1056
05:00 PM	18	267	32	317	52	94	**24**	**170**	**21**	294	**38**	353	**50**	**101**	**36**	**187**	1027
05:15 PM	26	**327**	**35**	**388**	**63**	73	23	159	19	**338**	30	**387**	40	76	16	132	**1066**
05:30 PM	20	269	32	321	59	**97**	10	166	18	294	32	344	31	79	28	138	969
Total Volume	95	1182	129	1406	225	350	75	650	75	1238	133	1446	164	344	108	616	4118
% App. Total	6.8	84.1	9.2		34.6	53.8	11.5		5.2	85.6	9.2		26.6	55.8	17.5		
PHF	.766	.904	.921	.906	.893	.902	.781	.956	.893	.916	.875	.934	.820	.851	.750	.824	.966

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City of Torrance
N/S: Prairie Avenue
E/W: West 182nd Street
Weather: Clear

File Name : 04_TOR_Prairie_W 182nd PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:45 PM				04:45 PM				04:00 PM			
+0 mins.	18	267	32	317	51	86	18	155	17	312	33	362	**56**	**103**	**34**	**193**
+15 mins.	**26**	327	35	388	52	94	**24**	**170**	**21**	294	**38**	353	42	76	23	141
+30 mins.	20	269	32	321	**63**	73	23	159	19	**338**	30	**387**	55	97	30	182
+45 mins.	16	**340**	**36**	**392**	59	**97**	10	166	18	294	32	344	43	88	28	159
Total Volume	80	1203	135	1418	225	350	75	650	75	1238	133	1446	196	364	115	675
% App. Total	5.6	84.8	9.5		34.6	53.8	11.5		5.2	85.6	9.2		29	53.9	17	
PHF	.769	.885	.938	.904	.893	.902	.781	.956	.893	.916	.875	.934	.875	.883	.846	.874

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City of Torrance
N/S: Prairie Avenue
E/W: West 190th Street
Weather: Clear

File Name : 05_TOR_Prairie_W 190th AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

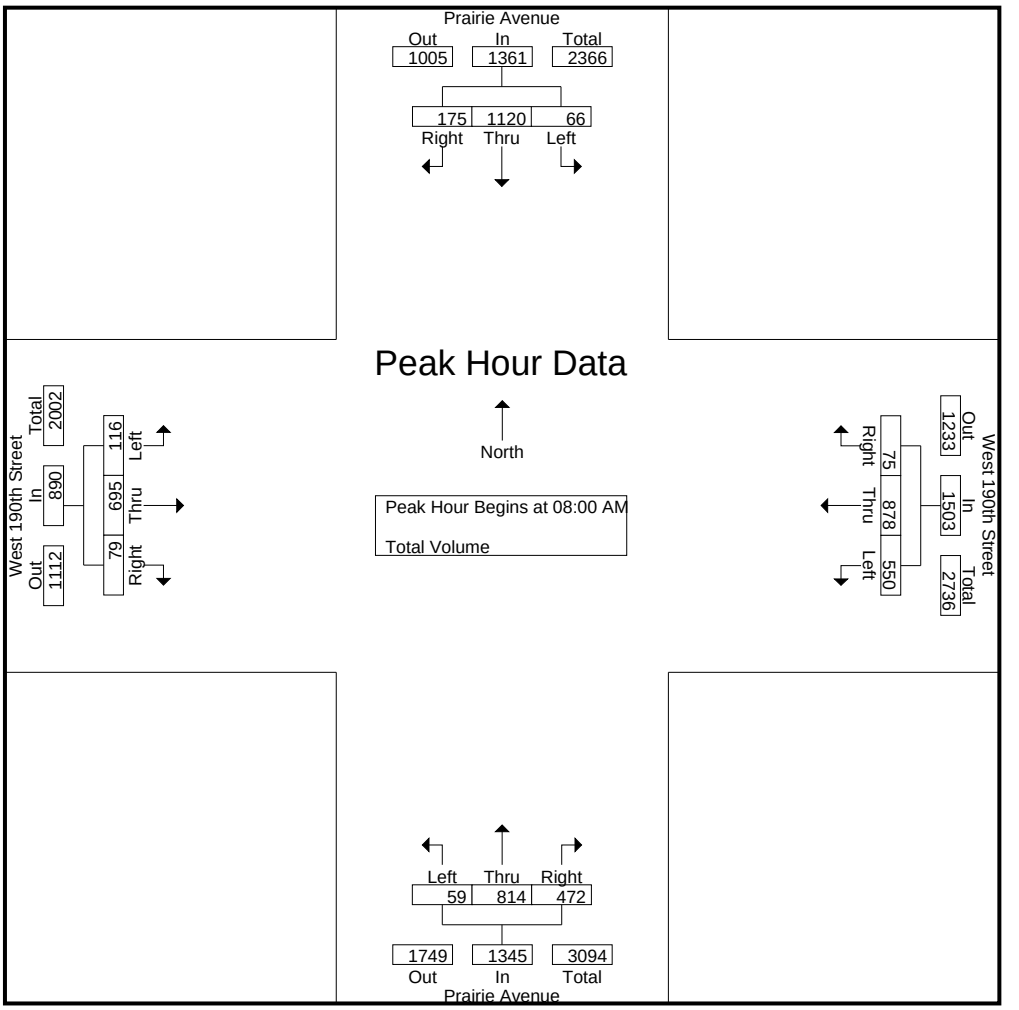
	Prairie Avenue Southbound				West 190th Street Westbound				Prairie Avenue Northbound				West 190th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	9	164	21	194	59	124	7	190	12	209	93	314	16	111	7	134	832
07:15 AM	10	194	31	235	94	165	13	272	12	166	108	286	21	150	9	180	973
07:30 AM	9	294	39	342	116	218	14	348	19	253	110	382	22	170	17	209	1281
07:45 AM	10	311	39	360	138	238	21	397	15	217	116	348	24	154	16	194	1299
Total	38	963	130	1131	407	745	55	1207	58	845	427	1330	83	585	49	717	4385
08:00 AM	12	262	34	308	105	188	12	305	17	207	149	373	23	189	21	233	1219
08:15 AM	19	270	48	337	141	204	16	361	8	185	107	300	21	193	14	228	1226
08:30 AM	19	312	53	384	130	215	24	369	16	221	112	349	25	144	17	186	1288
08:45 AM	16	276	40	332	174	271	23	468	18	201	104	323	47	169	27	243	1366
Total	66	1120	175	1361	550	878	75	1503	59	814	472	1345	116	695	79	890	5099
Grand Total	104	2083	305	2492	957	1623	130	2710	117	1659	899	2675	199	1280	128	1607	9484
Apprch %	4.2	83.6	12.2		35.3	59.9	4.8		4.4	62	33.6		12.4	79.7	8		
Total %	1.1	22	3.2	26.3	10.1	17.1	1.4	28.6	1.2	17.5	9.5	28.2	2.1	13.5	1.3	16.9	

	Prairie Avenue Southbound				West 190th Street Westbound				Prairie Avenue Northbound				West 190th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	12	262	34	308	105	188	12	305	17	207	**149**	**373**	23	189	21	233	1219
08:15 AM	**19**	270	48	337	141	204	16	361	8	185	107	300	21	**193**	14	228	1226
08:30 AM	19	**312**	**53**	**384**	130	215	**24**	369	16	**221**	112	349	25	144	17	186	1288
08:45 AM	16	276	40	332	**174**	**271**	23	**468**	**18**	201	104	323	**47**	169	**27**	**243**	**1366**
Total Volume	66	1120	175	1361	550	878	75	1503	59	814	472	1345	116	695	79	890	5099
% App. Total	4.8	82.3	12.9		36.6	58.4	5		4.4	60.5	35.1		13	78.1	8.9		
PHF	.868	.897	.825	.886	.790	.810	.781	.803	.819	.921	.792	.901	.617	.900	.731	.916	.933

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City of Torrance
N/S: Prairie Avenue
E/W: West 190th Street
Weather: Clear

File Name : 05_TOR_Prairie_W 190th AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				08:00 AM				07:30 AM				08:00 AM			
+0 mins.	10	311	39	360	105	188	12	305	**19**	**253**	110	**382**	23	189	21	233
+15 mins.	12	262	34	308	141	204	16	361	15	217	116	348	21	**193**	14	228
+30 mins.	**19**	270	48	337	130	215	**24**	369	17	207	**149**	373	25	144	17	186
+45 mins.	19	**312**	**53**	**384**	**174**	**271**	23	**468**	8	185	107	300	**47**	169	**27**	**243**
Total Volume	60	1155	174	1389	550	878	75	1503	59	862	482	1403	116	695	79	890
% App. Total	4.3	83.2	12.5		36.6	58.4	5		4.2	61.4	34.4		13	78.1	8.9	
PHF	.789	.925	.821	.904	.790	.810	.781	.803	.776	.852	.809	.918	.617	.900	.731	.916

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City of Torrance
N/S: Prairie Avenue
E/W: West 190th Street
Weather: Clear

File Name : 05_TOR_Prairie_W 190th PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

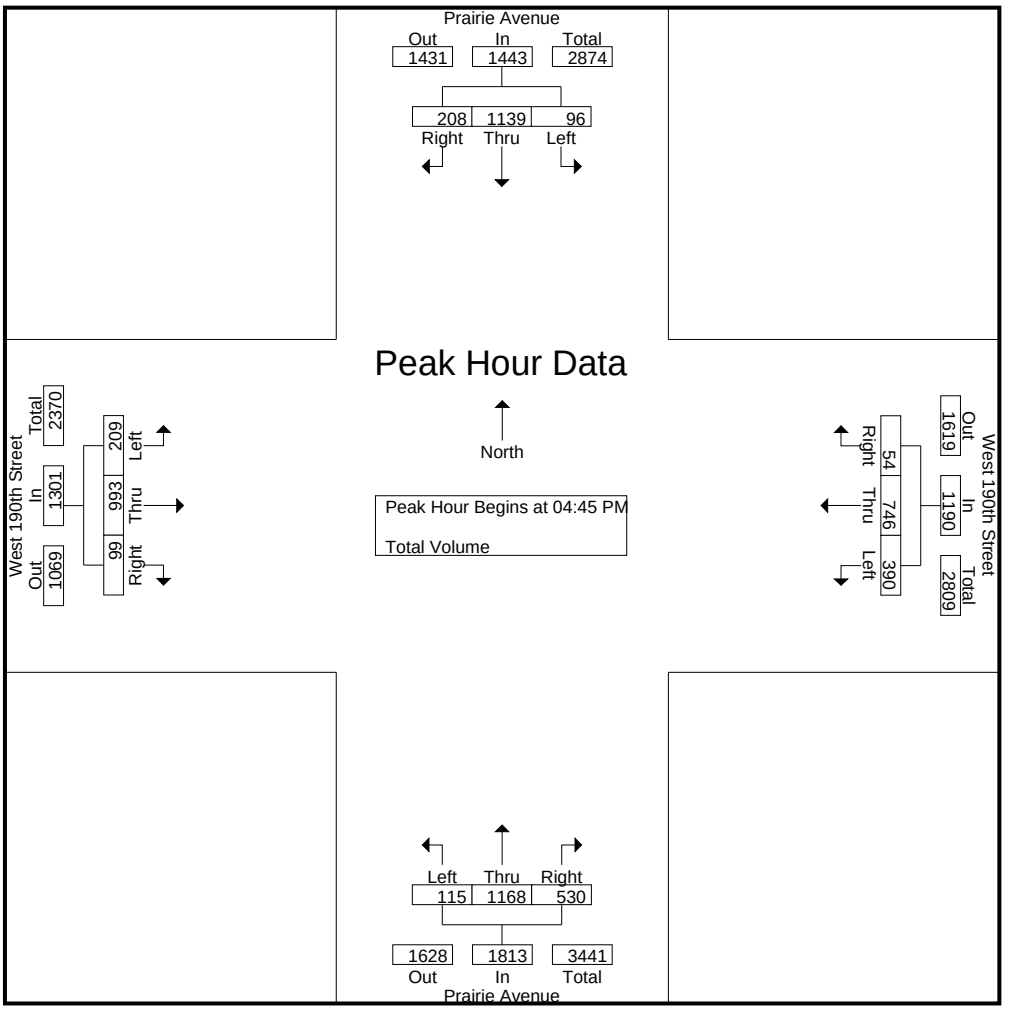
	Prairie Avenue Southbound				West 190th Street Westbound				Prairie Avenue Northbound				West 190th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	24	296	56	376	105	158	16	279	18	285	120	423	54	219	30	303	1381
04:15 PM	11	312	38	361	97	180	16	293	21	301	93	415	52	246	26	324	1393
04:30 PM	18	283	46	347	93	161	8	262	21	298	103	422	53	224	24	301	1332
04:45 PM	14	292	49	355	104	204	15	323	28	259	106	393	51	266	30	347	1418
Total	67	1183	189	1439	399	703	55	1157	88	1143	422	1653	210	955	110	1275	5524
05:00 PM	33	289	54	376	90	173	12	275	29	317	148	494	49	229	26	304	1449
05:15 PM	20	259	54	333	99	206	14	319	31	292	152	475	64	263	22	349	1476
05:30 PM	29	299	51	379	97	163	13	273	27	300	124	451	45	235	21	301	1404
05:45 PM	12	279	55	346	85	202	24	311	19	194	93	306	64	239	32	335	1298
Total	94	1126	214	1434	371	744	63	1178	106	1103	517	1726	222	966	101	1289	5627
Grand Total	161	2309	403	2873	770	1447	118	2335	194	2246	939	3379	432	1921	211	2564	11151
Apprch %	5.6	80.4	14		33	62	5.1		5.7	66.5	27.8		16.8	74.9	8.2		
Total %	1.4	20.7	3.6	25.8	6.9	13	1.1	20.9	1.7	20.1	8.4	30.3	3.9	17.2	1.9	23	

	Prairie Avenue Southbound				West 190th Street Westbound				Prairie Avenue Northbound				West 190th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	14	292	49	355	**104**	204	**15**	**323**	28	259	106	393	51	**266**	**30**	347	1418
05:00 PM	**33**	289	**54**	376	90	173	12	275	29	**317**	148	**494**	49	229	26	304	1449
05:15 PM	20	259	54	333	99	**206**	14	319	**31**	292	**152**	475	**64**	263	22	**349**	**1476**
05:30 PM	29	**299**	51	**379**	97	163	13	273	27	300	124	451	45	235	21	301	1404
Total Volume	96	1139	208	1443	390	746	54	1190	115	1168	530	1813	209	993	99	1301	5747
% App. Total	6.7	78.9	14.4		32.8	62.7	4.5		6.3	64.4	29.2		16.1	76.3	7.6		
PHF	.727	.952	.963	.952	.938	.905	.900	.921	.927	.921	.872	.918	.816	.933	.825	.932	.973

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City of Torrance
N/S: Prairie Avenue
E/W: West 190th Street
Weather: Clear

File Name : 05_TOR_Prairie_W 190th PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:30 PM			
+0 mins.	14	292	49	355	**104**	204	**15**	**323**	28	259	106	393	53	224	24	301
+15 mins.	**33**	289	**54**	376	90	173	12	275	29	**317**	148	**494**	51	**266**	**30**	347
+30 mins.	20	259	54	333	99	**206**	14	319	**31**	292	**152**	475	49	229	26	304
+45 mins.	29	**299**	51	**379**	97	163	13	273	27	300	124	451	**64**	263	22	**349**
Total Volume	96	1139	208	1443	390	746	54	1190	115	1168	530	1813	217	982	102	1301
% App. Total	6.7	78.9	14.4		32.8	62.7	4.5		6.3	64.4	29.2		16.7	75.5	7.8	
PHF	.727	.952	.963	.952	.938	.905	.900	.921	.927	.921	.872	.918	.848	.923	.850	.932

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City of Torrance
N/S: Prairie Avenue/Madrona Avenue
E/W: Del Amo Boulevard
Weather: Clear

File Name : 06_TOR_Madrona_Del Amo AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

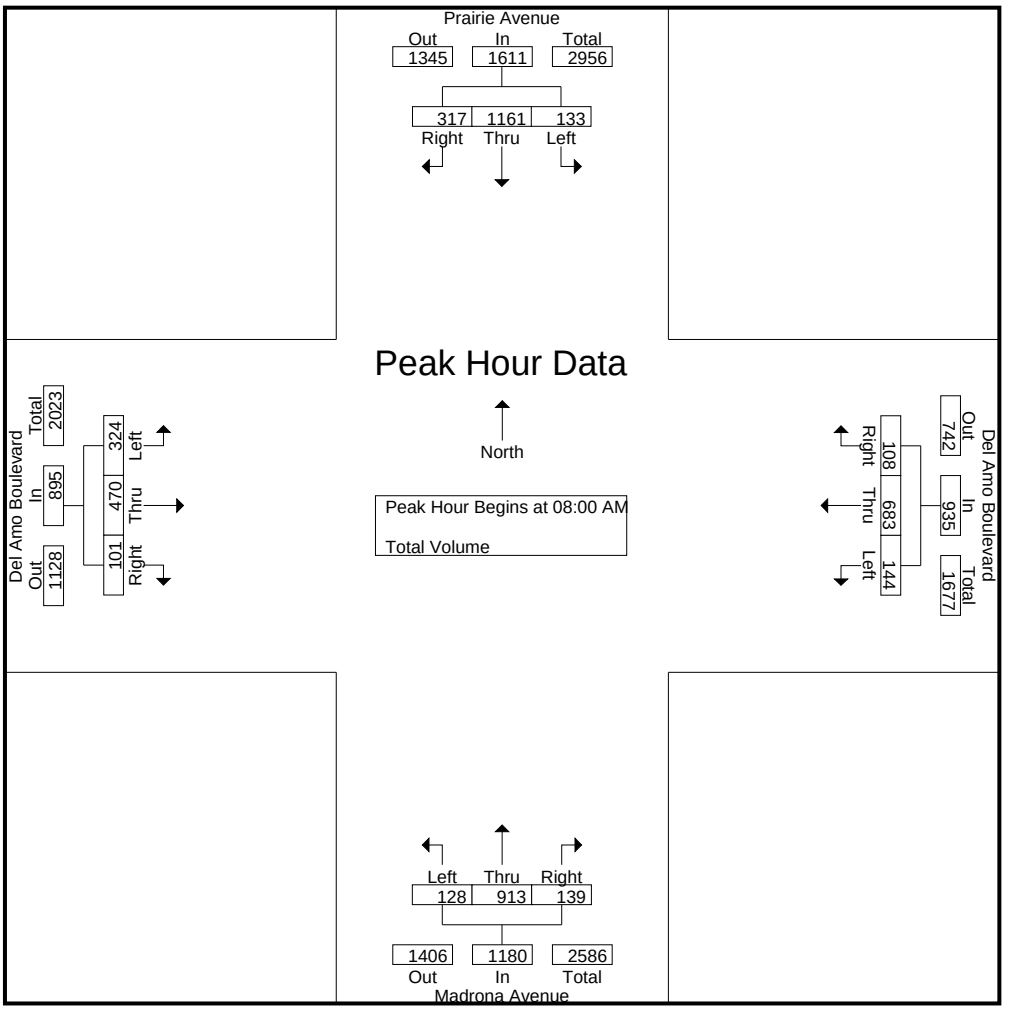
	Prairie Avenue Southbound				Del Amo Boulevard Westbound				Madrona Avenue Northbound				Del Amo Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	18	148	52	218	10	76	32	118	12	220	19	251	51	60	6	117	704
07:15 AM	19	170	69	258	16	132	35	183	18	195	20	233	65	89	10	164	838
07:30 AM	22	298	91	411	20	112	31	163	18	279	31	328	76	78	10	164	1066
07:45 AM	31	324	71	426	31	168	28	227	27	242	29	298	77	120	18	215	1166
Total	90	940	283	1313	77	488	126	691	75	936	99	1110	269	347	44	660	3774
08:00 AM	31	262	68	361	34	152	23	209	35	243	38	316	99	116	21	236	1122
08:15 AM	34	264	62	360	27	172	26	225	34	202	39	275	73	131	21	225	1085
08:30 AM	27	323	112	462	31	175	34	240	32	245	31	308	72	89	22	183	1193
08:45 AM	41	312	75	428	52	184	25	261	27	223	31	281	80	134	37	251	1221
Total	133	1161	317	1611	144	683	108	935	128	913	139	1180	324	470	101	895	4621
Grand Total	223	2101	600	2924	221	1171	234	1626	203	1849	238	2290	593	817	145	1555	8395
Apprch %	7.6	71.9	20.5		13.6	72	14.4		8.9	80.7	10.4		38.1	52.5	9.3		
Total %	2.7	25	7.1	34.8	2.6	13.9	2.8	19.4	2.4	22	2.8	27.3	7.1	9.7	1.7	18.5	

	Prairie Avenue Southbound				Del Amo Boulevard Westbound				Madrona Avenue Northbound				Del Amo Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	31	262	68	361	34	152	23	209	**35**	243	38	**316**	**99**	116	21	236	1122
08:15 AM	34	264	62	360	27	172	26	225	34	202	**39**	275	73	131	21	225	1085
08:30 AM	27	**323**	**112**	**462**	31	175	**34**	240	32	**245**	31	308	72	89	22	183	1193
08:45 AM	**41**	312	75	428	**52**	**184**	25	**261**	27	223	31	281	80	**134**	**37**	**251**	**1221**
Total Volume	133	1161	317	1611	144	683	108	935	128	913	139	1180	324	470	101	895	4621
% App. Total	8.3	72.1	19.7		15.4	73	11.6		10.8	77.4	11.8		36.2	52.5	11.3		
PHF	.811	.899	.708	.872	.692	.928	.794	.896	.914	.932	.891	.934	.818	.877	.682	.891	.946

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City of Torrance
N/S: Prairie Avenue/Madrona Avenue
E/W: Del Amo Boulevard
Weather: Clear

File Name : 06_TOR_Madrona_Del Amo AM
Site Code : 05721690
Start Date : 11/30/2021



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				07:30 AM				08:00 AM			
+0 mins.	31	262	68	361	34	152	23	209	18	**279**	31	**328**	**99**	116	21	236
+15 mins.	34	264	62	360	27	172	26	225	27	242	29	298	73	131	21	225
+30 mins.	27	**323**	**112**	**462**	31	175	**34**	240	**35**	243	38	316	72	89	22	183
+45 mins.	**41**	312	75	428	**52**	**184**	25	**261**	34	202	**39**	275	80	**134**	**37**	**251**
Total Volume	133	1161	317	1611	144	683	108	935	114	966	137	1217	324	470	101	895
% App. Total	8.3	72.1	19.7		15.4	73	11.6		9.4	79.4	11.3		36.2	52.5	11.3	
PHF	.811	.899	.708	.872	.692	.928	.794	.896	.814	.866	.878	.928	.818	.877	.682	.891

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City of Torrance
N/S: Prairie Avenue/Madrona Avenue
E/W: Del Amo Boulevard
Weather: Clear

File Name : 06_TOR_Madrona_Del Amo PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

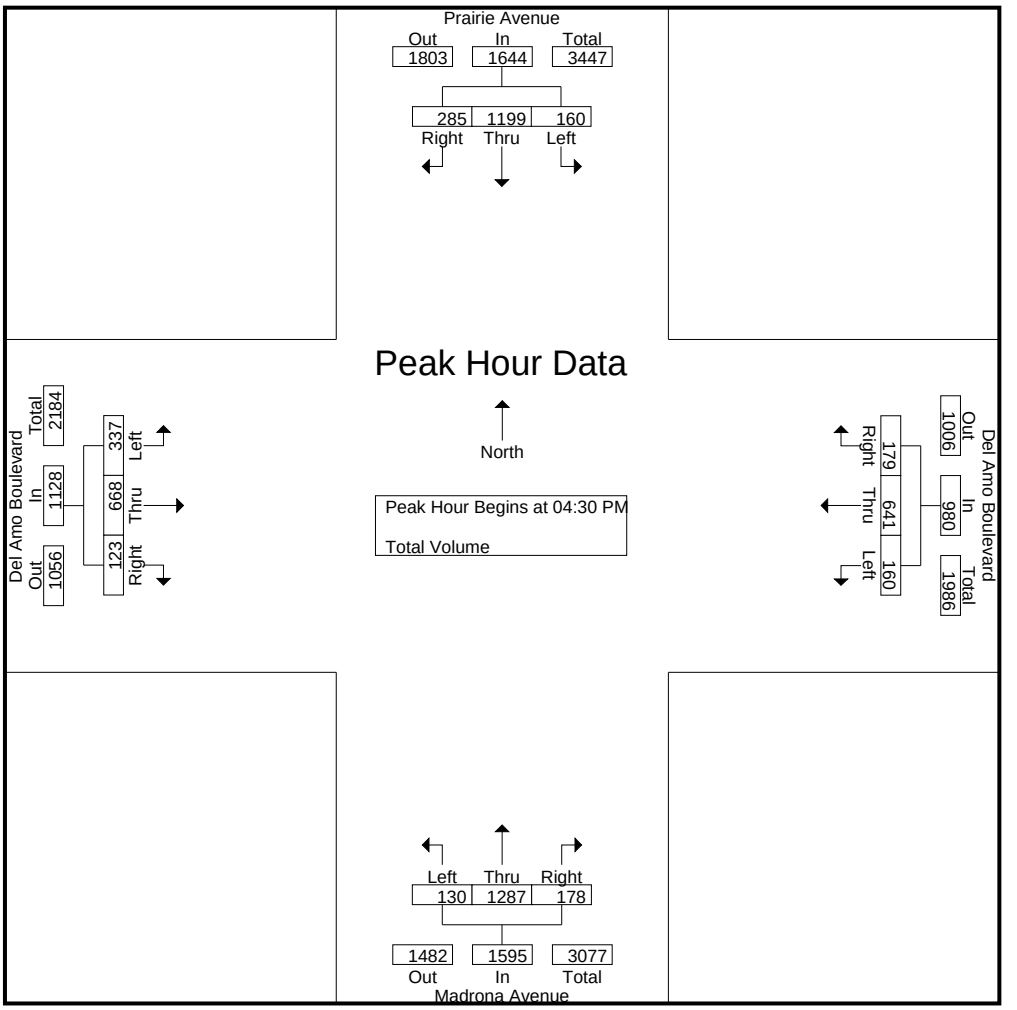
	Prairie Avenue Southbound				Del Amo Boulevard Westbound				Madrona Avenue Northbound				Del Amo Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	42	343	81	466	27	133	41	201	26	300	26	352	70	130	39	239	1258
04:15 PM	24	311	87	422	24	165	25	214	25	305	34	364	89	162	25	276	1276
04:30 PM	31	323	64	418	30	129	43	202	38	317	61	416	63	156	31	250	1286
04:45 PM	34	299	74	407	39	176	47	262	34	284	47	365	88	172	27	287	1321
Total	131	1276	306	1713	120	603	156	879	123	1206	168	1497	310	620	122	1052	5141
05:00 PM	45	329	68	442	47	149	48	244	38	361	36	435	97	178	28	303	1424
05:15 PM	50	248	79	377	44	187	41	272	20	325	34	379	89	162	37	288	1316
05:30 PM	48	312	85	445	21	145	32	198	38	284	48	370	63	119	36	218	1231
05:45 PM	43	278	67	388	39	184	25	248	35	218	29	282	59	123	37	219	1137
Total	186	1167	299	1652	151	665	146	962	131	1188	147	1466	308	582	138	1028	5108
Grand Total	317	2443	605	3365	271	1268	302	1841	254	2394	315	2963	618	1202	260	2080	10249
Apprch %	9.4	72.6	18		14.7	68.9	16.4		8.6	80.8	10.6		29.7	57.8	12.5		
Total %	3.1	23.8	5.9	32.8	2.6	12.4	2.9	18	2.5	23.4	3.1	28.9	6	11.7	2.5	20.3	

	Prairie Avenue Southbound				Del Amo Boulevard Westbound				Madrona Avenue Northbound				Del Amo Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	31	323	64	418	30	129	43	202	**38**	317	**61**	416	63	156	31	250	1286
04:45 PM	34	299	74	407	39	176	47	262	34	284	47	365	88	172	27	287	1321
05:00 PM	45	**329**	68	**442**	**47**	149	**48**	244	38	**361**	36	**435**	**97**	**178**	28	**303**	**1424**
05:15 PM	**50**	248	**79**	377	44	**187**	41	**272**	20	325	34	379	89	162	**37**	288	1316
Total Volume	160	1199	285	1644	160	641	179	980	130	1287	178	1595	337	668	123	1128	5347
% App. Total	9.7	72.9	17.3		16.3	65.4	18.3		8.2	80.7	11.2		29.9	59.2	10.9		
PHF	.800	.911	.902	.930	.851	.857	.932	.901	.855	.891	.730	.917	.869	.938	.831	.931	.939

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City of Torrance
N/S: Prairie Avenue/Madrona Avenue
E/W: Del Amo Boulevard
Weather: Clear

File Name : 06_TOR_Madrona_Del Amo PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	**42**	**343**	81	**466**	30	129	43	202	**38**	317	**61**	416	63	156	31	250
+15 mins.	24	311	**87**	422	39	176	47	262	34	284	47	365	88	172	27	287
+30 mins.	31	323	64	418	**47**	149	**48**	244	38	**361**	36	**435**	**97**	**178**	28	**303**
+45 mins.	34	299	74	407	44	**187**	41	**272**	20	325	34	379	89	162	**37**	288
Total Volume	131	1276	306	1713	160	641	179	980	130	1287	178	1595	337	668	123	1128
% App. Total	7.6	74.5	17.9		16.3	65.4	18.3		8.2	80.7	11.2		29.9	59.2	10.9	
PHF	.780	.930	.879	.919	.851	.857	.932	.901	.855	.891	.730	.917	.869	.938	.831	.931

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City of Torrance
N/S: Anza Avenue
E/W: Torrance Boulevard
Weather: Clear

File Name : 07_TOR_Anza_Torrance AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

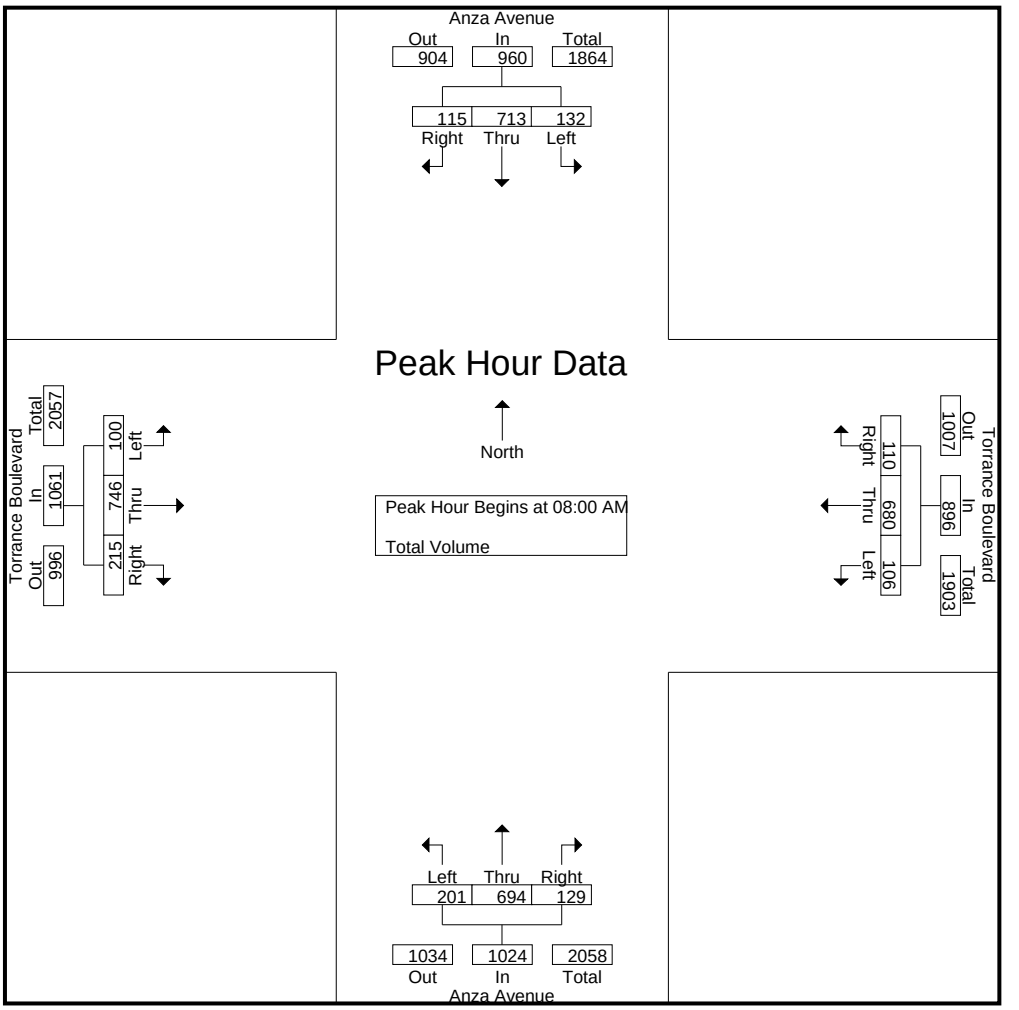
	Anza Avenue Southbound				Torrance Boulevard Westbound				Anza Avenue Northbound				Torrance Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	4	66	21	91	9	110	11	130	31	93	15	139	14	76	21	111	471
07:15 AM	11	73	20	104	3	163	10	176	28	128	19	175	27	137	29	193	648
07:30 AM	16	126	56	198	17	218	18	253	69	175	20	264	26	188	45	259	974
07:45 AM	24	159	48	231	14	210	25	249	48	168	18	234	42	213	59	314	1028
Total	55	424	145	624	43	701	64	808	176	564	72	812	109	614	154	877	3121
08:00 AM	30	152	27	209	15	137	15	167	35	163	26	224	33	155	33	221	821
08:15 AM	23	195	27	245	19	159	23	201	36	143	28	207	16	184	44	244	897
08:30 AM	30	176	26	232	47	182	36	265	68	197	30	295	24	176	59	259	1051
08:45 AM	49	190	35	274	25	202	36	263	62	191	45	298	27	231	79	337	1172
Total	132	713	115	960	106	680	110	896	201	694	129	1024	100	746	215	1061	3941
Grand Total	187	1137	260	1584	149	1381	174	1704	377	1258	201	1836	209	1360	369	1938	7062
Apprch %	11.8	71.8	16.4		8.7	81	10.2		20.5	68.5	10.9		10.8	70.2	19		
Total %	2.6	16.1	3.7	22.4	2.1	19.6	2.5	24.1	5.3	17.8	2.8	26	3	19.3	5.2	27.4	

	Anza Avenue Southbound				Torrance Boulevard Westbound				Anza Avenue Northbound				Torrance Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	30	152	27	209	15	137	15	167	35	163	26	224	**33**	155	33	221	821
08:15 AM	23	**195**	27	245	19	159	23	201	36	143	28	207	16	184	44	244	897
08:30 AM	30	176	26	232	**47**	182	**36**	**265**	**68**	**197**	30	295	24	176	59	259	1051
08:45 AM	**49**	190	**35**	**274**	25	**202**	36	263	62	191	**45**	**298**	27	**231**	**79**	**337**	**1172**
Total Volume	132	713	115	960	106	680	110	896	201	694	129	1024	100	746	215	1061	3941
% App. Total	13.8	74.3	12		11.8	75.9	12.3		19.6	67.8	12.6		9.4	70.3	20.3		
PHF	.673	.914	.821	.876	.564	.842	.764	.845	.739	.881	.717	.859	.758	.807	.680	.787	.841

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City of Torrance
N/S: Anza Avenue
E/W: Torrance Boulevard
Weather: Clear

File Name : 07_TOR_Anza_Torrance AM
Site Code : 05721690
Start Date : 11/30/2021



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	30	152	27	209	15	137	15	167	35	163	26	224	**33**	155	33	221
+15 mins.	23	**195**	27	245	19	159	23	201	36	143	28	207	16	184	44	244
+30 mins.	30	176	26	232	**47**	182	**36**	**265**	**68**	**197**	30	295	24	176	59	259
+45 mins.	**49**	190	**35**	**274**	25	**202**	36	263	62	191	**45**	**298**	27	**231**	**79**	**337**
Total Volume	132	713	115	960	106	680	110	896	201	694	129	1024	100	746	215	1061
% App. Total	13.8	74.3	12		11.8	75.9	12.3		19.6	67.8	12.6		9.4	70.3	20.3	
PHF	.673	.914	.821	.876	.564	.842	.764	.845	.739	.881	.717	.859	.758	.807	.680	.787

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City of Torrance
N/S: Anza Avenue
E/W: Torrance Boulevard
Weather: Clear

File Name : 07_TOR_Anza_Torrance PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

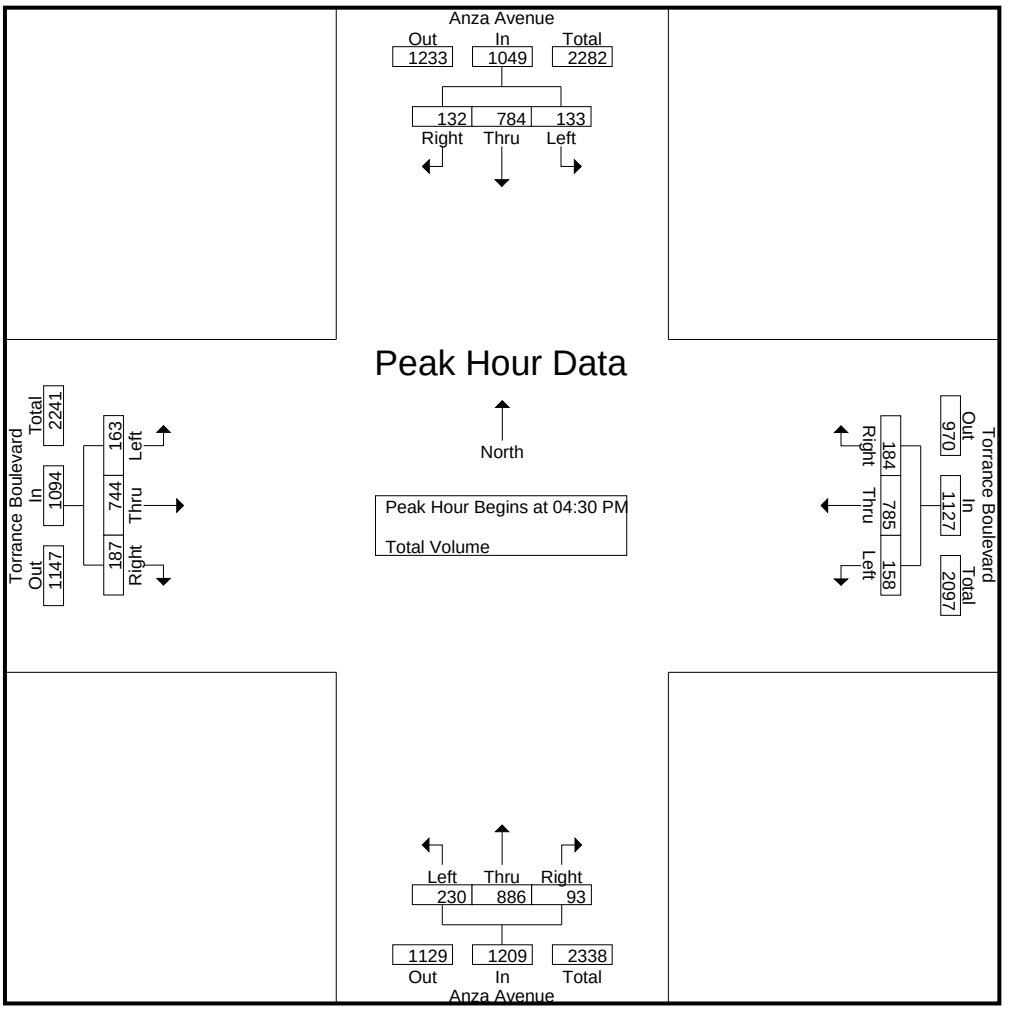
	Anza Avenue Southbound				Torrance Boulevard Westbound				Anza Avenue Northbound				Torrance Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	39	194	29	262	32	181	41	254	82	197	23	302	40	233	51	324	1142
04:15 PM	36	199	18	253	32	206	35	273	41	189	21	251	42	201	46	289	1066
04:30 PM	31	197	36	264	27	208	41	276	59	226	29	314	39	175	37	251	1105
04:45 PM	34	188	36	258	33	201	42	276	57	216	21	294	48	207	61	316	1144
Total	140	778	119	1037	124	796	159	1079	239	828	94	1161	169	816	195	1180	4457
05:00 PM	33	187	26	246	49	190	50	289	59	198	15	272	41	178	43	262	1069
05:15 PM	35	212	34	281	49	186	51	286	55	246	28	329	35	184	46	265	1161
05:30 PM	33	224	34	291	40	178	36	254	58	203	19	280	19	174	40	233	1058
05:45 PM	36	169	32	237	42	199	42	283	67	166	32	265	26	159	55	240	1025
Total	137	792	126	1055	180	753	179	1112	239	813	94	1146	121	695	184	1000	4313
Grand Total	277	1570	245	2092	304	1549	338	2191	478	1641	188	2307	290	1511	379	2180	8770
Apprch %	13.2	75	11.7		13.9	70.7	15.4		20.7	71.1	8.1		13.3	69.3	17.4		
Total %	3.2	17.9	2.8	23.9	3.5	17.7	3.9	25	5.5	18.7	2.1	26.3	3.3	17.2	4.3	24.9	

	Anza Avenue Southbound				Torrance Boulevard Westbound				Anza Avenue Northbound				Torrance Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	31	197	**36**	264	27	**208**	41	276	**59**	226	**29**	314	39	175	37	251	1105
04:45 PM	34	188	36	258	33	201	42	276	57	216	21	294	**48**	**207**	**61**	**316**	1144
05:00 PM	33	187	26	246	**49**	190	50	**289**	59	198	15	272	41	178	43	262	1069
05:15 PM	**35**	**212**	34	**281**	49	186	**51**	286	55	**246**	28	**329**	35	184	46	265	**1161**
Total Volume	133	784	132	1049	158	785	184	1127	230	886	93	1209	163	744	187	1094	4479
% App. Total	12.7	74.7	12.6		14	69.7	16.3		19	73.3	7.7		14.9	68	17.1		
PHF	.950	.925	.917	.933	.806	.944	.902	.975	.975	.900	.802	.919	.849	.899	.766	.866	.964

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City of Torrance
N/S: Anza Avenue
E/W: Torrance Boulevard
Weather: Clear

File Name : 07_TOR_Anza_Torrance PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:30 PM				04:30 PM				04:00 PM			
+0 mins.	34	188	**36**	258	27	**208**	41	276	**59**	226	**29**	314	40	**233**	51	**324**
+15 mins.	33	187	26	246	33	201	42	276	57	216	21	294	42	201	46	289
+30 mins.	**35**	212	34	281	**49**	190	50	**289**	59	198	15	272	39	175	37	251
+45 mins.	33	**224**	34	**291**	49	186	**51**	286	55	**246**	28	**329**	**48**	207	**61**	316
Total Volume	135	811	130	1076	158	785	184	1127	230	886	93	1209	169	816	195	1180
% App. Total	12.5	75.4	12.1		14	69.7	16.3		19	73.3	7.7		14.3	69.2	16.5	
PHF	.964	.905	.903	.924	.806	.944	.902	.975	.975	.900	.802	.919	.880	.876	.799	.910

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City of Torrance
N/S: Hawthorne Boulevard
E/W: Torrance Boulevard
Weather: Clear

File Name : 08_TOR_Hawthorne_Torrance AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

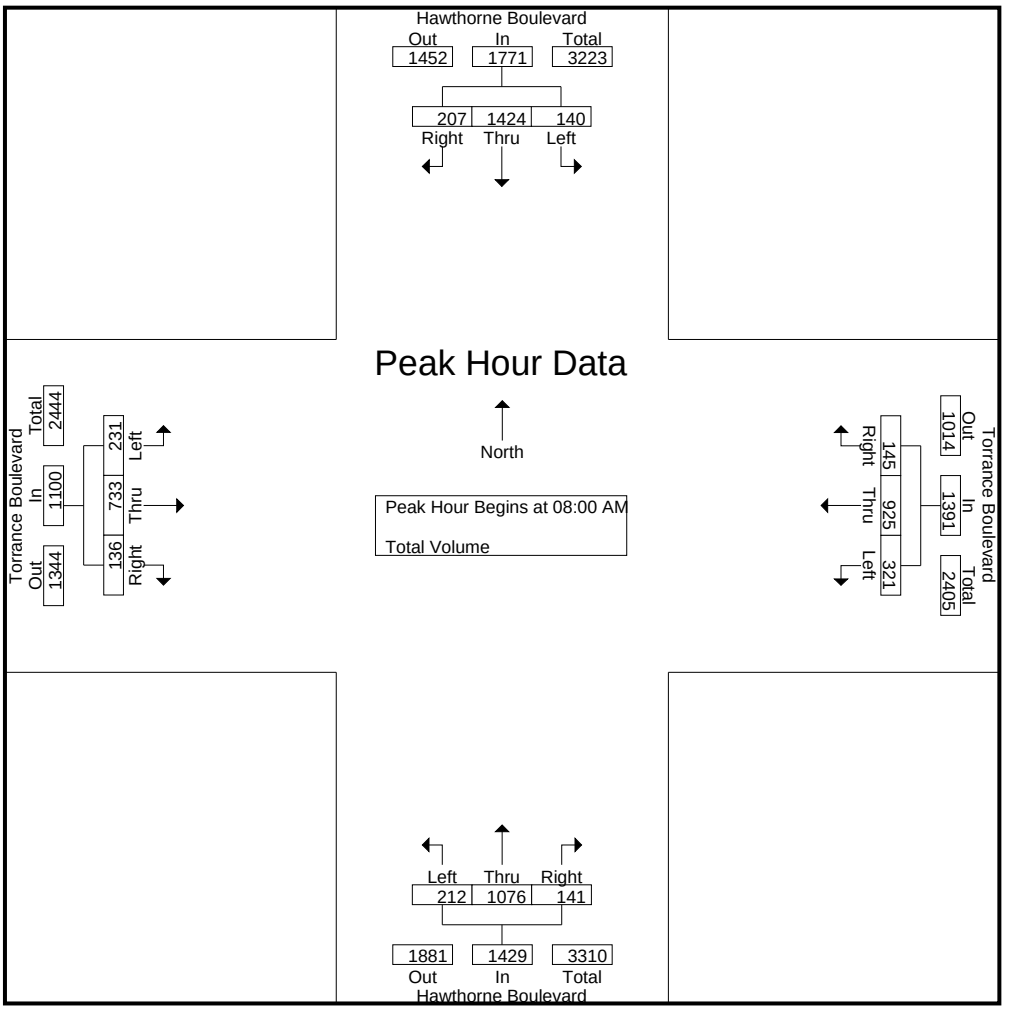
	Hawthorne Boulevard Southbound				Torrance Boulevard Westbound				Hawthorne Boulevard Northbound				Torrance Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	16	194	28	238	43	115	16	174	39	205	13	257	27	94	23	144	813
07:15 AM	14	247	30	291	35	188	22	245	42	237	23	302	34	137	16	187	1025
07:30 AM	25	316	55	396	71	226	32	329	51	252	19	322	49	165	48	262	1309
07:45 AM	22	379	57	458	70	198	21	289	37	277	25	339	55	155	53	263	1349
Total	77	1136	170	1383	219	727	91	1037	169	971	80	1220	165	551	140	856	4496
08:00 AM	32	364	46	442	78	193	33	304	47	259	27	333	60	177	30	267	1346
08:15 AM	35	336	39	410	74	213	32	319	46	243	33	322	63	162	22	247	1298
08:30 AM	30	361	64	455	83	295	40	418	52	265	44	361	43	179	35	257	1491
08:45 AM	43	363	58	464	86	224	40	350	67	309	37	413	65	215	49	329	1556
Total	140	1424	207	1771	321	925	145	1391	212	1076	141	1429	231	733	136	1100	5691
Grand Total	217	2560	377	3154	540	1652	236	2428	381	2047	221	2649	396	1284	276	1956	10187
Apprch %	6.9	81.2	12		22.2	68	9.7		14.4	77.3	8.3		20.2	65.6	14.1		
Total %	2.1	25.1	3.7	31	5.3	16.2	2.3	23.8	3.7	20.1	2.2	26	3.9	12.6	2.7	19.2	

	Hawthorne Boulevard Southbound				Torrance Boulevard Westbound				Hawthorne Boulevard Northbound				Torrance Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	32	**364**	46	442	78	193	33	304	47	259	27	333	60	177	30	267	1346
08:15 AM	35	336	39	410	74	213	32	319	46	243	33	322	63	162	22	247	1298
08:30 AM	30	361	**64**	455	83	**295**	**40**	**418**	52	265	**44**	361	43	179	35	257	1491
08:45 AM	**43**	363	58	**464**	**86**	224	40	350	**67**	**309**	37	**413**	**65**	**215**	**49**	**329**	**1556**
Total Volume	140	1424	207	1771	321	925	145	1391	212	1076	141	1429	231	733	136	1100	5691
% App. Total	7.9	80.4	11.7		23.1	66.5	10.4		14.8	75.3	9.9		21	66.6	12.4		
PHF	.814	.978	.809	.954	.933	.784	.906	.832	.791	.871	.801	.865	.888	.852	.694	.836	.914

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City of Torrance
N/S: Hawthorne Boulevard
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Weather: Clear

File Name : 08_TOR_Hawthorne_Torrance AM
Site Code : 05721690
Start Date : 11/30/2021
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	32	**364**	46	442	78	193	33	304	47	259	27	333	60	177	30	267
+15 mins.	35	336	39	410	74	213	32	319	46	243	33	322	63	162	22	247
+30 mins.	30	361	**64**	455	83	**295**	**40**	**418**	52	265	**44**	361	43	179	35	257
+45 mins.	**43**	363	58	**464**	**86**	224	40	350	**67**	**309**	37	**413**	**65**	**215**	**49**	**329**
Total Volume	140	1424	207	1771	321	925	145	1391	212	1076	141	1429	231	733	136	1100
% App. Total	7.9	80.4	11.7		23.1	66.5	10.4		14.8	75.3	9.9		21	66.6	12.4	
PHF	.814	.978	.809	.954	.933	.784	.906	.832	.791	.871	.801	.865	.888	.852	.694	.836

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City of Torrance
N/S: Hawthorne Boulevard
E/W: Torrance Boulevard
Weather: Clear

File Name : 08_TOR_Hawthorne_Torrance PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

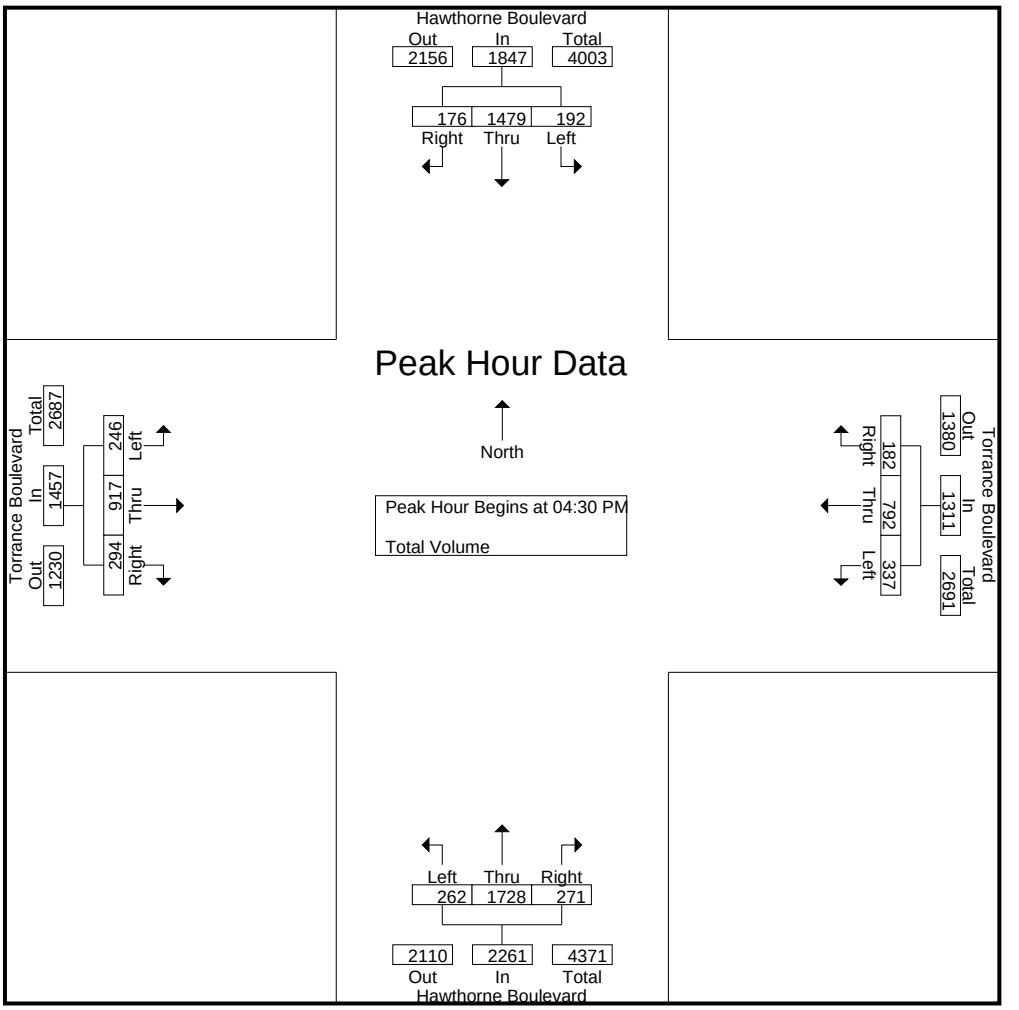
	Hawthorne Boulevard Southbound				Torrance Boulevard Westbound				Hawthorne Boulevard Northbound				Torrance Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	45	323	42	410	84	189	48	321	74	404	55	533	80	230	81	391	1655
04:15 PM	49	366	41	456	84	193	43	320	83	454	54	591	58	177	69	304	1671
04:30 PM	37	362	44	443	87	184	60	331	75	425	52	552	62	224	70	356	1682
04:45 PM	55	432	42	529	96	183	34	313	61	405	71	537	74	208	70	352	1731
Total	186	1483	169	1838	351	749	185	1285	293	1688	232	2213	274	839	290	1403	6739
05:00 PM	51	323	50	424	77	245	51	373	65	399	88	552	57	287	71	415	1764
05:15 PM	49	362	40	451	77	180	37	294	61	499	60	620	53	198	83	334	1699
05:30 PM	53	332	62	447	70	169	47	286	61	449	56	566	69	164	81	314	1613
05:45 PM	59	319	38	416	78	170	34	282	68	360	61	489	65	140	54	259	1446
Total	212	1336	190	1738	302	764	169	1235	255	1707	265	2227	244	789	289	1322	6522
Grand Total	398	2819	359	3576	653	1513	354	2520	548	3395	497	4440	518	1628	579	2725	13261
Apprch %	11.1	78.8	10		25.9	60	14		12.3	76.5	11.2		19	59.7	21.2		
Total %	3	21.3	2.7	27	4.9	11.4	2.7	19	4.1	25.6	3.7	33.5	3.9	12.3	4.4	20.5	

	Hawthorne Boulevard Southbound				Torrance Boulevard Westbound				Hawthorne Boulevard Northbound				Torrance Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	37	362	44	443	87	184	**60**	331	**75**	425	52	552	62	224	70	356	1682
04:45 PM	**55**	**432**	42	**529**	**96**	183	34	313	61	405	71	537	**74**	208	70	352	1731
05:00 PM	51	323	**50**	424	77	**245**	51	**373**	65	399	**88**	552	57	**287**	71	**415**	**1764**
05:15 PM	49	362	40	451	77	180	37	294	61	**499**	60	**620**	53	198	**83**	334	1699
Total Volume	192	1479	176	1847	337	792	182	1311	262	1728	271	2261	246	917	294	1457	6876
% App. Total	10.4	80.1	9.5		25.7	60.4	13.9		11.6	76.4	12		16.9	62.9	20.2		
PHF	.873	.856	.880	.873	.878	.808	.758	.879	.873	.866	.770	.912	.831	.799	.886	.878	.974

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City of Torrance
N/S: Hawthorne Boulevard
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Weather: Clear

File Name : 08_TOR_Hawthorne_Torrance PM
Site Code : 05721690
Start Date : 11/30/2021
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:45 PM				04:30 PM			
+0 mins.	49	366	41	456	84	193	43	320	61	405	71	537	62	224	70	356
+15 mins.	37	362	44	443	87	184	**60**	331	**65**	399	**88**	552	**74**	208	70	352
+30 mins.	**55**	**432**	42	**529**	**96**	183	34	313	61	**499**	60	**620**	57	**287**	71	**415**
+45 mins.	51	323	**50**	424	77	**245**	51	**373**	61	449	56	566	53	198	**83**	334
Total Volume	192	1483	177	1852	344	805	188	1337	248	1752	275	2275	246	917	294	1457
% App. Total	10.4	80.1	9.6		25.7	60.2	14.1		10.9	77	12.1		16.9	62.9	20.2	
PHF	.873	.858	.885	.875	.896	.821	.783	.896	.954	.878	.781	.917	.831	.799	.886	.878

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City of Torrance
N/S: Madrona Avenue
E/W: Torrance Boulevard
Weather: Clear

File Name : 09_TOR_Madrona_Torrance AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

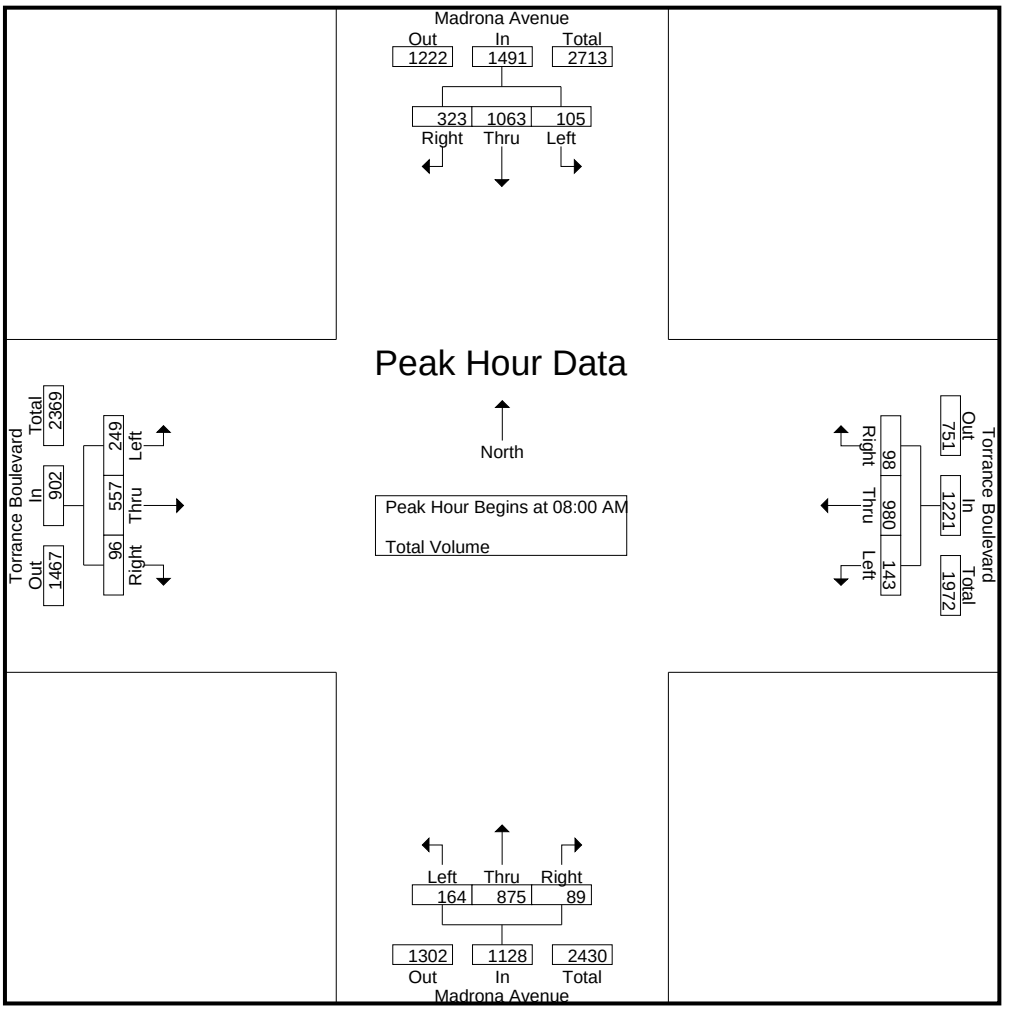
	Madrona Avenue Southbound				Torrance Boulevard Westbound				Madrona Avenue Northbound				Torrance Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	10	113	37	160	20	140	13	173	9	139	11	159	40	68	8	116	608
07:15 AM	15	120	43	178	16	181	15	212	30	173	4	207	53	95	15	163	760
07:30 AM	23	218	61	302	21	236	15	272	48	195	21	264	67	111	21	199	1037
07:45 AM	20	240	81	341	29	236	24	289	40	206	18	264	61	133	24	218	1112
Total	68	691	222	981	86	793	67	946	127	713	54	894	221	407	68	696	3517
08:00 AM	26	225	72	323	37	218	20	275	41	190	15	246	66	136	14	216	1060
08:15 AM	31	309	71	411	28	215	23	266	42	198	21	261	55	122	25	202	1140
08:30 AM	24	198	81	303	40	301	26	367	41	211	14	266	62	147	22	231	1167
08:45 AM	24	331	99	454	38	246	29	313	40	276	39	355	66	152	35	253	1375
Total	105	1063	323	1491	143	980	98	1221	164	875	89	1128	249	557	96	902	4742
Grand Total	173	1754	545	2472	229	1773	165	2167	291	1588	143	2022	470	964	164	1598	8259
Apprch %	7	71	22		10.6	81.8	7.6		14.4	78.5	7.1		29.4	60.3	10.3		
Total %	2.1	21.2	6.6	29.9	2.8	21.5	2	26.2	3.5	19.2	1.7	24.5	5.7	11.7	2	19.3	

	Madrona Avenue Southbound				Torrance Boulevard Westbound				Madrona Avenue Northbound				Torrance Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	26	225	72	323	37	218	20	275	41	190	15	246	**66**	136	14	216	1060
08:15 AM	**31**	309	71	411	28	215	23	266	**42**	198	21	261	55	122	25	202	1140
08:30 AM	24	198	81	303	**40**	**301**	26	**367**	41	211	14	266	62	147	22	231	1167
08:45 AM	24	**331**	**99**	**454**	38	246	**29**	313	40	**276**	**39**	**355**	66	**152**	**35**	**253**	**1375**
Total Volume	105	1063	323	1491	143	980	98	1221	164	875	89	1128	249	557	96	902	4742
% App. Total	7	71.3	21.7		11.7	80.3	8		14.5	77.6	7.9		27.6	61.8	10.6		
PHF	.847	.803	.816	.821	.894	.814	.845	.832	.976	.793	.571	.794	.943	.916	.686	.891	.862

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City of Torrance
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Weather: Clear

File Name : 09_TOR_Madrona_Torrance AM
Site Code : 05721690
Start Date : 11/30/2021
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	26	225	72	323	37	218	20	275	41	190	15	246	**66**	136	14	216
+15 mins.	**31**	309	71	411	28	215	23	266	**42**	198	21	261	55	122	25	202
+30 mins.	24	198	81	303	**40**	**301**	26	**367**	41	211	14	266	62	147	22	231
+45 mins.	24	**331**	**99**	**454**	38	246	**29**	313	40	**276**	**39**	**355**	66	**152**	**35**	**253**
Total Volume	105	1063	323	1491	143	980	98	1221	164	875	89	1128	249	557	96	902
% App. Total	7	71.3	21.7		11.7	80.3	8		14.5	77.6	7.9		27.6	61.8	10.6	
PHF	.847	.803	.816	.821	.894	.814	.845	.832	.976	.793	.571	.794	.943	.916	.686	.891

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City of Torrance
N/S: Madrona Avenue
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Weather: Clear

File Name : 09_TOR_Madrona_Torrance PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

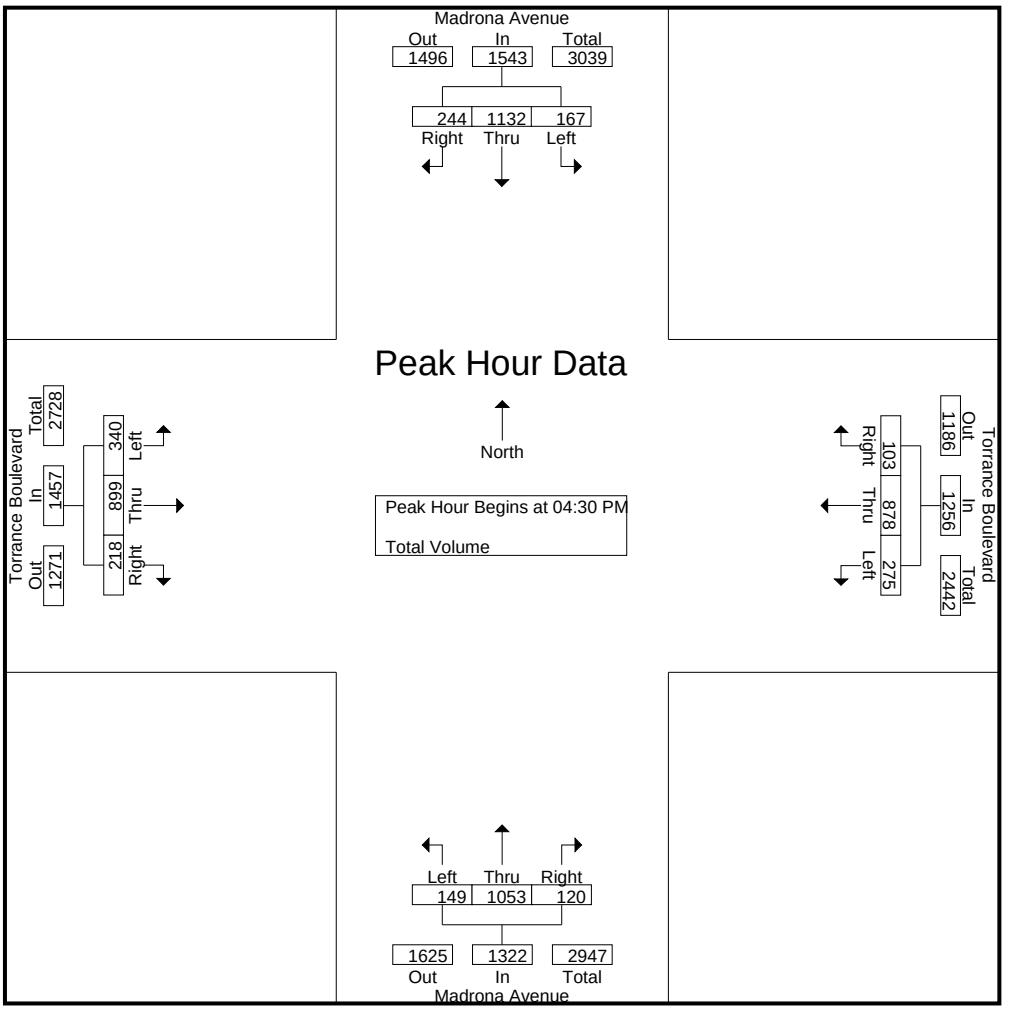
	Madrona Avenue Southbound				Torrance Boulevard Westbound				Madrona Avenue Northbound				Torrance Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	41	273	80	394	64	239	30	333	40	251	35	326	83	226	58	367	1420
04:15 PM	36	294	75	405	49	210	24	283	30	288	25	343	68	174	45	287	1318
04:30 PM	46	250	56	352	60	230	28	318	43	234	26	303	74	196	57	327	1300
04:45 PM	35	309	75	419	63	222	31	316	30	268	30	328	78	188	39	305	1368
Total	158	1126	286	1570	236	901	113	1250	143	1041	116	1300	303	784	199	1286	5406
05:00 PM	55	277	53	385	81	234	24	339	40	281	42	363	102	293	74	469	1556
05:15 PM	31	296	60	387	71	192	20	283	36	270	22	328	86	222	48	356	1354
05:30 PM	32	258	49	339	64	236	23	323	23	239	31	293	76	178	43	297	1252
05:45 PM	32	278	41	351	52	187	21	260	31	253	36	320	56	157	42	255	1186
Total	150	1109	203	1462	268	849	88	1205	130	1043	131	1304	320	850	207	1377	5348
Grand Total	308	2235	489	3032	504	1750	201	2455	273	2084	247	2604	623	1634	406	2663	10754
Apprch %	10.2	73.7	16.1		20.5	71.3	8.2		10.5	80	9.5		23.4	61.4	15.2		
Total %	2.9	20.8	4.5	28.2	4.7	16.3	1.9	22.8	2.5	19.4	2.3	24.2	5.8	15.2	3.8	24.8	

	Madrona Avenue Southbound				Torrance Boulevard Westbound				Madrona Avenue Northbound				Torrance Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	46	250	56	352	60	230	28	318	**43**	234	26	303	74	196	57	327	1300
04:45 PM	35	**309**	**75**	**419**	63	222	**31**	316	30	268	30	328	78	188	39	305	1368
05:00 PM	**55**	277	53	385	**81**	**234**	24	**339**	40	**281**	**42**	**363**	**102**	**293**	**74**	**469**	**1556**
05:15 PM	31	296	60	387	71	192	20	283	36	270	22	328	86	222	48	356	1354
Total Volume	167	1132	244	1543	275	878	103	1256	149	1053	120	1322	340	899	218	1457	5578
% App. Total	10.8	73.4	15.8		21.9	69.9	8.2		11.3	79.7	9.1		23.3	61.7	15		
PHF	.759	.916	.813	.921	.849	.938	.831	.926	.866	.937	.714	.910	.833	.767	.736	.777	.896

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City of Torrance
N/S: Madrona Avenue
E/W: Torrance Boulevard
Weather: Clear

File Name : 09_TOR_Madrona_Torrance PM
Site Code : 05721690
Start Date : 11/30/2021
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:45 PM				04:15 PM				04:30 PM			
+0 mins.	41	273	**80**	394	63	222	**31**	316	30	**288**	25	343	74	196	57	327
+15 mins.	36	294	75	405	**81**	234	24	**339**	**43**	234	26	303	78	188	39	305
+30 mins.	**46**	250	56	352	71	192	20	283	30	268	30	328	**102**	**293**	**74**	**469**
+45 mins.	35	**309**	75	**419**	64	**236**	23	323	40	281	**42**	**363**	86	222	48	356
Total Volume	158	1126	286	1570	279	884	98	1261	143	1071	123	1337	340	899	218	1457
% App. Total	10.1	71.7	18.2		22.1	70.1	7.8		10.7	80.1	9.2		23.3	61.7	15	
PHF	.859	.911	.894	.937	.861	.936	.790	.930	.831	.930	.732	.921	.833	.767	.736	.777

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City of Torrance
N/S: Maple Avenue
E/W: Torrance Boulevard
Weather: Clear

File Name : 10_TOR_Maple_Torrance AM
Site Code : 05721690
Start Date : 11/30/2021
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Groups Printed- Total Volume

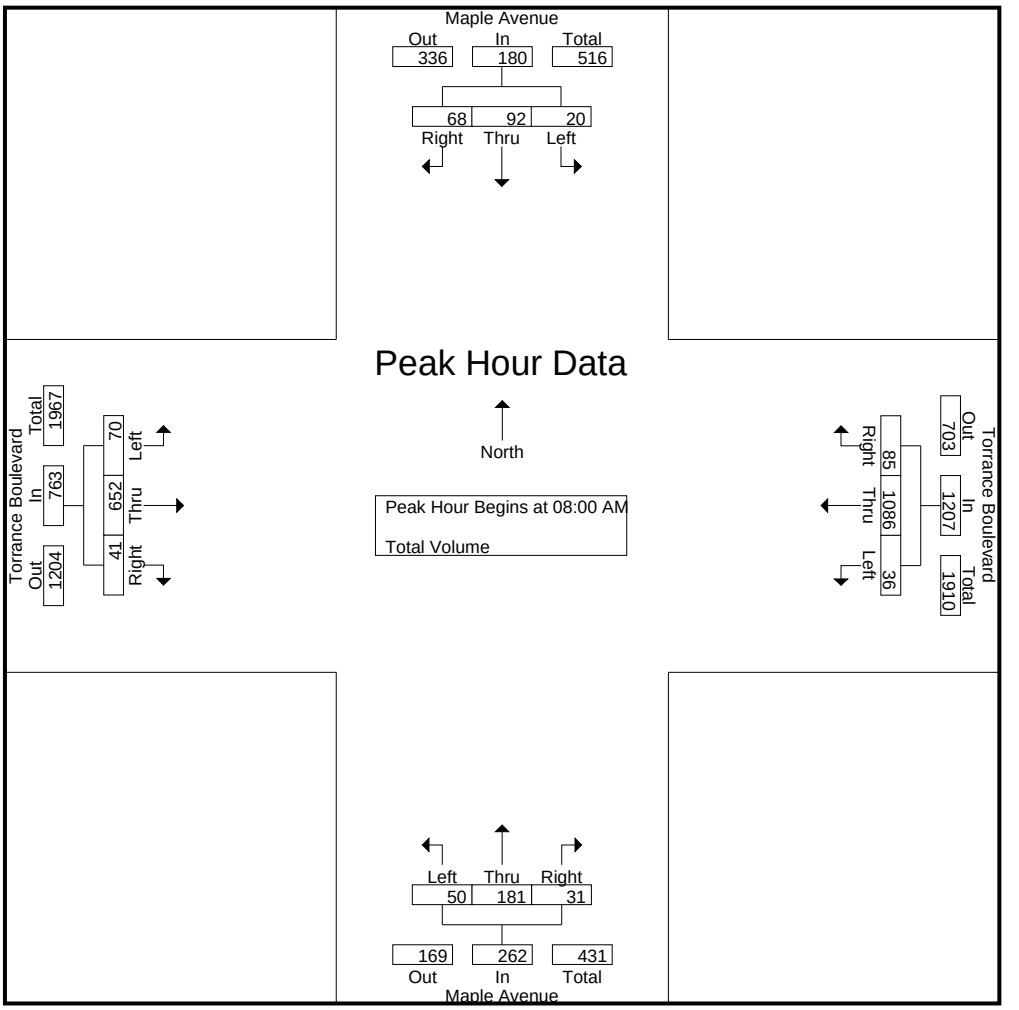
	Maple Avenue Southbound				Torrance Boulevard Westbound				Maple Avenue Northbound				Torrance Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	3	7	7	17	2	171	18	191	3	27	2	32	6	71	10	87	327
07:15 AM	3	11	11	25	7	208	18	233	14	42	6	62	3	99	4	106	426
07:30 AM	1	13	24	38	4	236	18	258	9	34	6	49	5	132	7	144	489
07:45 AM	5	15	16	36	6	254	26	286	8	43	3	54	8	160	6	174	550
Total	12	46	58	116	19	869	80	968	34	146	17	197	22	462	27	511	1792
08:00 AM	5	12	18	35	2	236	22	260	6	45	8	59	14	161	9	184	538
08:15 AM	5	23	15	43	6	279	28	313	12	45	5	62	21	151	9	181	599
08:30 AM	7	25	20	52	13	283	19	315	13	44	6	63	17	150	10	177	607
08:45 AM	3	32	15	50	15	288	16	319	19	47	12	78	18	190	13	221	668
Total	20	92	68	180	36	1086	85	1207	50	181	31	262	70	652	41	763	2412
Grand Total	32	138	126	296	55	1955	165	2175	84	327	48	459	92	1114	68	1274	4204
Apprch %	10.8	46.6	42.6		2.5	89.9	7.6		18.3	71.2	10.5		7.2	87.4	5.3		
Total %	0.8	3.3	3	7	1.3	46.5	3.9	51.7	2	7.8	1.1	10.9	2.2	26.5	1.6	30.3	

	Maple Avenue Southbound				Torrance Boulevard Westbound				Maple Avenue Northbound				Torrance Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	5	12	18	35	2	236	22	260	6	45	8	59	14	161	9	184	538
08:15 AM	5	23	15	43	6	279	**28**	313	12	45	5	62	**21**	151	9	181	599
08:30 AM	**7**	25	**20**	**52**	13	283	19	315	13	44	6	63	17	150	10	177	607
08:45 AM	3	**32**	15	50	**15**	**288**	16	**319**	**19**	**47**	**12**	**78**	18	**190**	**13**	**221**	**668**
Total Volume	20	92	68	180	36	1086	85	1207	50	181	31	262	70	652	41	763	2412
% App. Total	11.1	51.1	37.8		3	90	7		19.1	69.1	11.8		9.2	85.5	5.4		
PHF	.714	.719	.850	.865	.600	.943	.759	.946	.658	.963	.646	.840	.833	.858	.788	.863	.903

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City of Torrance
N/S: Maple Avenue
E/W: Torrance Boulevard
Weather: Clear

File Name : 10_TOR_Maple_Torrance AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	5	12	18	35	2	236	22	260	6	45	8	59	14	161	9	184
+15 mins.	5	23	15	43	6	279	**28**	313	12	45	5	62	**21**	151	9	181
+30 mins.	**7**	25	**20**	**52**	13	283	19	315	13	44	6	63	17	150	10	177
+45 mins.	3	**32**	15	50	**15**	**288**	16	**319**	**19**	**47**	**12**	**78**	18	**190**	**13**	**221**
Total Volume	20	92	68	180	36	1086	85	1207	50	181	31	262	70	652	41	763
% App. Total	11.1	51.1	37.8		3	90	7		19.1	69.1	11.8		9.2	85.5	5.4	
PHF	.714	.719	.850	.865	.600	.943	.759	.946	.658	.963	.646	.840	.833	.858	.788	.863

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City of Torrance
N/S: Maple Avenue
E/W: Torrance Boulevard
Weather: Clear

File Name : 10_TOR_Maple_Torrance PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

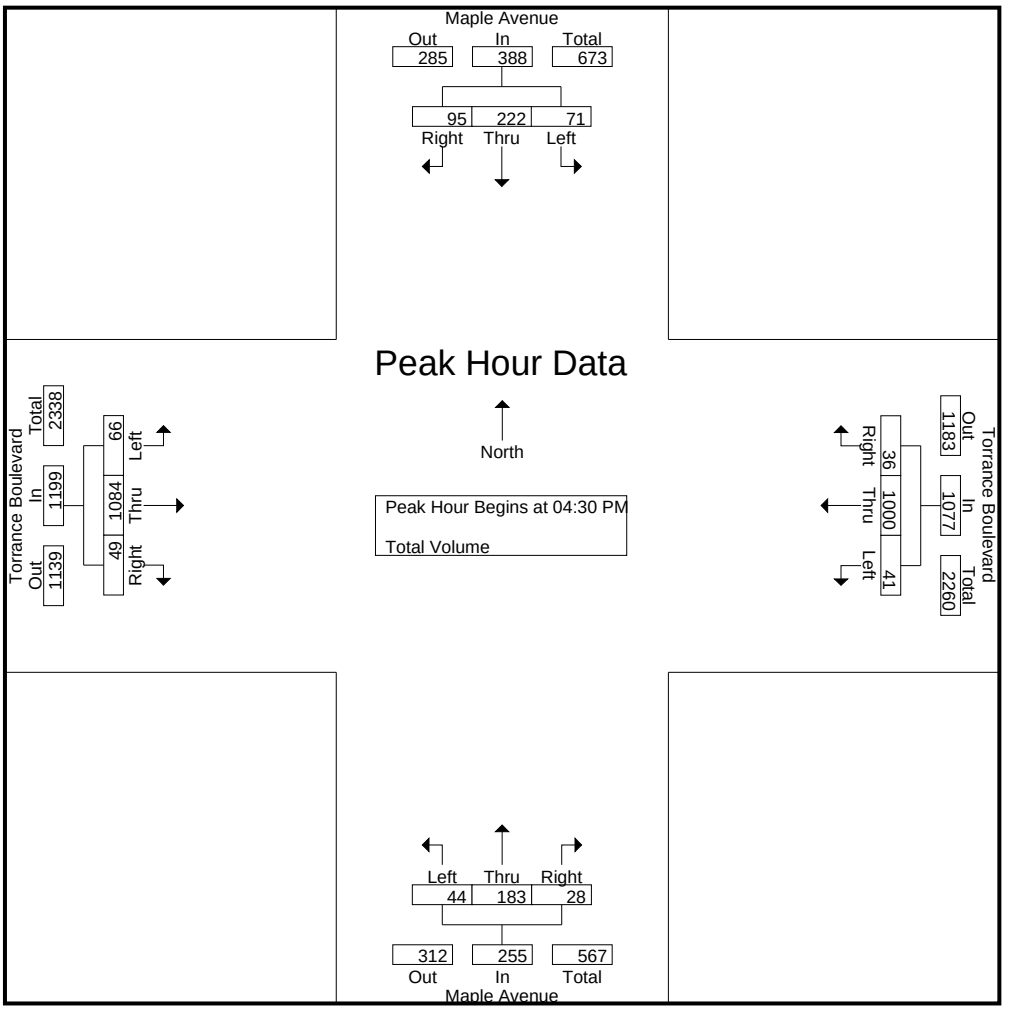
	Maple Avenue Southbound				Torrance Boulevard Westbound				Maple Avenue Northbound				Torrance Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	22	52	21	95	7	234	11	252	13	39	10	62	13	248	21	282	691
04:15 PM	13	52	31	96	4	225	5	234	9	27	10	46	13	238	19	270	646
04:30 PM	17	52	20	89	7	259	7	273	6	41	4	51	7	239	11	257	670
04:45 PM	16	51	25	92	10	252	7	269	14	47	7	68	22	263	8	293	722
Total	68	207	97	372	28	970	30	1028	42	154	31	227	55	988	59	1102	2729
05:00 PM	23	75	36	134	10	257	10	277	8	48	5	61	16	306	20	342	814
05:15 PM	15	44	14	73	14	232	12	258	16	47	12	75	21	276	10	307	713
05:30 PM	16	63	22	101	6	236	9	251	5	32	5	42	18	208	20	246	640
05:45 PM	9	43	23	75	11	230	8	249	7	34	2	43	13	214	13	240	607
Total	63	225	95	383	41	955	39	1035	36	161	24	221	68	1004	63	1135	2774
Grand Total	131	432	192	755	69	1925	69	2063	78	315	55	448	123	1992	122	2237	5503
Apprch %	17.4	57.2	25.4		3.3	93.3	3.3		17.4	70.3	12.3		5.5	89	5.5		
Total %	2.4	7.9	3.5	13.7	1.3	35	1.3	37.5	1.4	5.7	1	8.1	2.2	36.2	2.2	40.7	

	Maple Avenue Southbound				Torrance Boulevard Westbound				Maple Avenue Northbound				Torrance Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	17	52	20	89	7	**259**	7	273	6	41	4	51	7	239	11	257	670
04:45 PM	16	51	25	92	10	252	7	269	14	47	7	68	**22**	263	8	293	722
05:00 PM	**23**	**75**	**36**	**134**	10	257	10	**277**	8	**48**	5	61	16	**306**	**20**	**342**	**814**
05:15 PM	15	44	14	73	**14**	232	**12**	258	**16**	47	**12**	**75**	21	276	10	307	713
Total Volume	71	222	95	388	41	1000	36	1077	44	183	28	255	66	1084	49	1199	2919
% App. Total	18.3	57.2	24.5		3.8	92.9	3.3		17.3	71.8	11		5.5	90.4	4.1		
PHF	.772	.740	.660	.724	.732	.965	.750	.972	.688	.953	.583	.850	.750	.886	.613	.876	.896

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City of Torrance
N/S: Maple Avenue
E/W: Torrance Boulevard
Weather: Clear

File Name : 10_TOR_Maple_Torrance PM
Site Code : 05721690
Start Date : 11/30/2021
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	13	52	31	96	7	**259**	7	273	6	41	4	51	7	239	11	257
+15 mins.	17	52	20	89	10	252	7	269	14	47	7	68	**22**	263	8	293
+30 mins.	16	51	25	92	10	257	10	**277**	8	**48**	5	61	16	**306**	**20**	**342**
+45 mins.	**23**	**75**	**36**	**134**	**14**	232	**12**	258	**16**	47	**12**	**75**	21	276	10	307
Total Volume	69	230	112	411	41	1000	36	1077	44	183	28	255	66	1084	49	1199
% App. Total	16.8	56	27.3		3.8	92.9	3.3		17.3	71.8	11		5.5	90.4	4.1	
PHF	.750	.767	.778	.767	.732	.965	.750	.972	.688	.953	.583	.850	.750	.886	.613	.876

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City of Torrance
N/S: Crenshaw Boulevard
E/W: Torrance Boulevard
Weather: Clear

File Name : 11_TOR_Crenshaw_Torrance AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

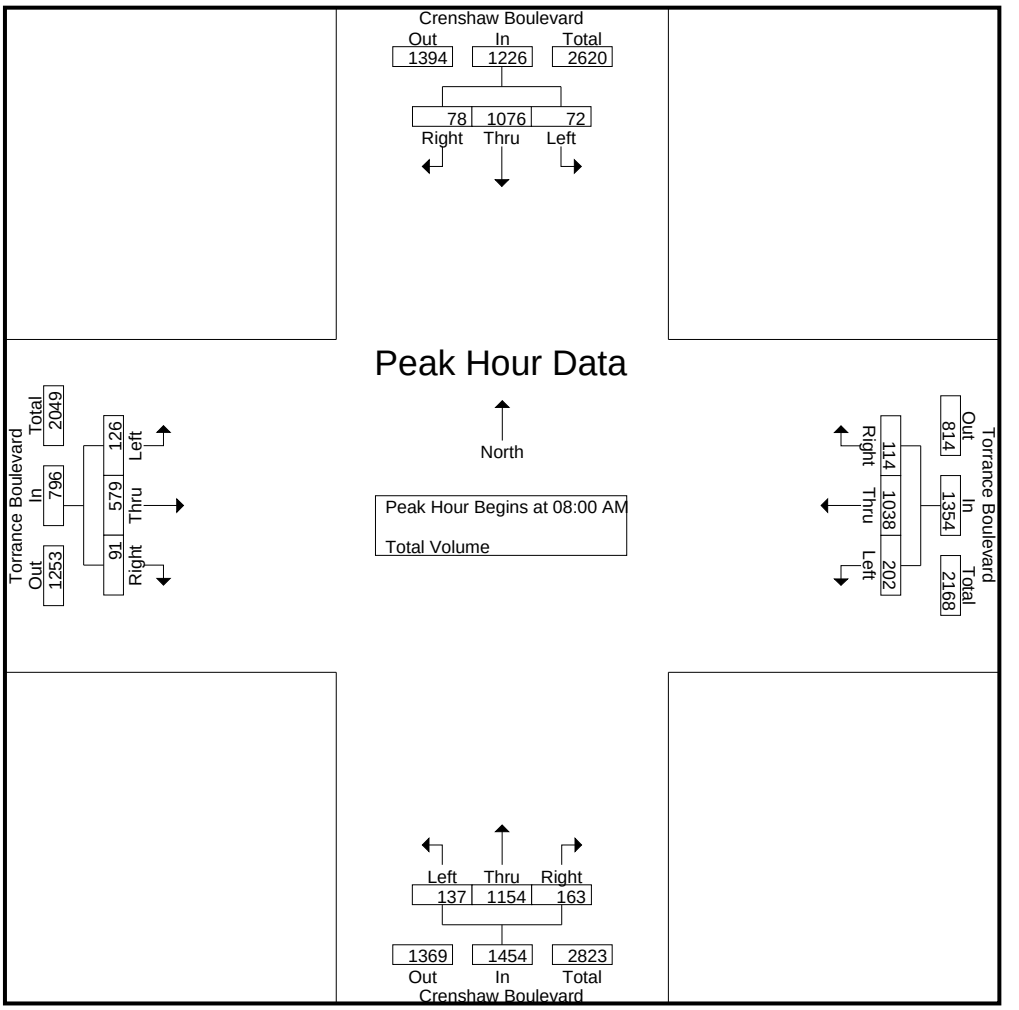
	Crenshaw Boulevard Southbound				Torrance Boulevard Westbound				Crenshaw Boulevard Northbound				Torrance Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	9	174	7	190	26	153	29	208	17	175	36	228	21	54	9	84	710
07:15 AM	10	194	13	217	32	230	22	284	24	215	22	261	33	79	9	121	883
07:30 AM	9	261	16	286	35	195	23	253	27	282	36	345	27	115	12	154	1038
07:45 AM	15	258	11	284	43	271	32	346	29	266	40	335	18	147	12	177	1142
Total	43	887	47	977	136	849	106	1091	97	938	134	1169	99	395	42	536	3773
08:00 AM	16	228	20	264	41	234	28	303	40	289	24	353	31	137	16	184	1104
08:15 AM	15	309	15	339	60	274	26	360	22	244	35	301	31	134	20	185	1185
08:30 AM	19	235	26	280	50	273	32	355	40	337	47	424	21	132	20	173	1232
08:45 AM	22	304	17	343	51	257	28	336	35	284	57	376	43	176	35	254	1309
Total	72	1076	78	1226	202	1038	114	1354	137	1154	163	1454	126	579	91	796	4830
Grand Total	115	1963	125	2203	338	1887	220	2445	234	2092	297	2623	225	974	133	1332	8603
Apprch %	5.2	89.1	5.7		13.8	77.2	9		8.9	79.8	11.3		16.9	73.1	10		
Total %	1.3	22.8	1.5	25.6	3.9	21.9	2.6	28.4	2.7	24.3	3.5	30.5	2.6	11.3	1.5	15.5	

	Crenshaw Boulevard Southbound				Torrance Boulevard Westbound				Crenshaw Boulevard Northbound				Torrance Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	16	228	20	264	41	234	28	303	**40**	289	24	353	31	137	16	184	1104
08:15 AM	15	**309**	15	339	**60**	**274**	26	**360**	22	244	35	301	31	134	20	185	1185
08:30 AM	19	235	**26**	280	50	273	**32**	355	40	**337**	47	**424**	21	132	20	173	1232
08:45 AM	**22**	304	17	**343**	51	257	28	336	35	284	**57**	376	**43**	**176**	**35**	**254**	**1309**
Total Volume	72	1076	78	1226	202	1038	114	1354	137	1154	163	1454	126	579	91	796	4830
% App. Total	5.9	87.8	6.4		14.9	76.7	8.4		9.4	79.4	11.2		15.8	72.7	11.4		
PHF	.818	.871	.750	.894	.842	.947	.891	.940	.856	.856	.715	.857	.733	.822	.650	.783	.922

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City of Torrance
N/S: Crenshaw Boulevard
E/W: Torrance Boulevard
Weather: Clear

File Name : 11_TOR_Crenshaw_Torrance AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				07:45 AM				08:00 AM				08:00 AM			
+0 mins.	16	228	20	264	43	271	**32**	346	**40**	289	24	353	31	137	16	184
+15 mins.	15	**309**	15	339	41	234	28	303	22	244	35	301	31	134	20	185
+30 mins.	19	235	**26**	280	**60**	**274**	26	**360**	40	**337**	47	**424**	21	132	20	173
+45 mins.	**22**	304	17	**343**	50	273	32	355	35	284	**57**	376	**43**	**176**	**35**	**254**
Total Volume	72	1076	78	1226	194	1052	118	1364	137	1154	163	1454	126	579	91	796
% App. Total	5.9	87.8	6.4		14.2	77.1	8.7		9.4	79.4	11.2		15.8	72.7	11.4	
PHF	.818	.871	.750	.894	.808	.960	.922	.947	.856	.856	.715	.857	.733	.822	.650	.783

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City of Torrance
N/S: Crenshaw Boulevard
E/W: Torrance Boulevard
Weather: Clear

File Name : 11_TOR_Crenshaw_Torrance PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

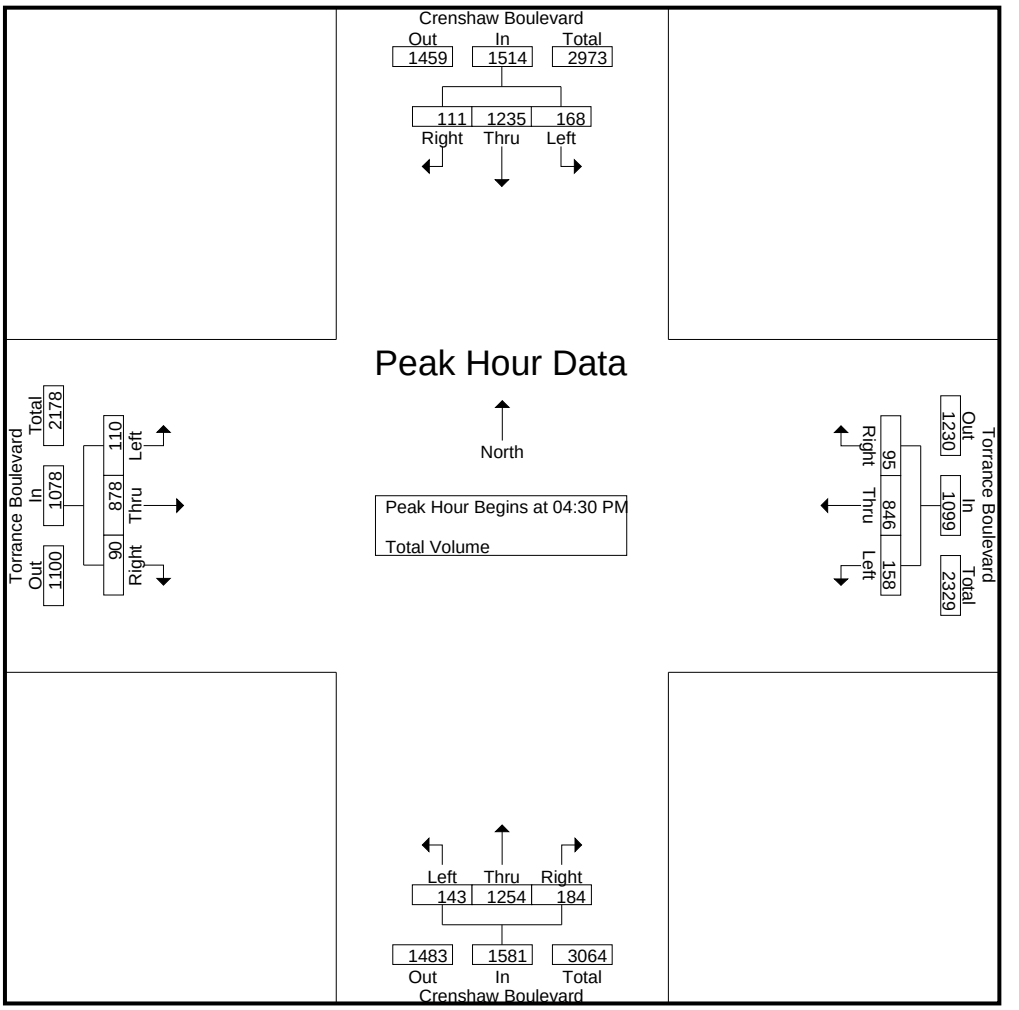
	Crenshaw Boulevard Southbound				Torrance Boulevard Westbound				Crenshaw Boulevard Northbound				Torrance Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	40	275	25	340	41	217	18	276	34	301	46	381	25	204	29	258	1255
04:15 PM	25	256	18	299	48	209	25	282	28	288	46	362	32	223	18	273	1216
04:30 PM	47	305	27	379	40	230	21	291	30	325	35	390	23	205	26	254	1314
04:45 PM	32	296	24	352	43	216	28	287	39	312	41	392	30	208	27	265	1296
Total	144	1132	94	1370	172	872	92	1136	131	1226	168	1525	110	840	100	1050	5081
05:00 PM	44	323	36	403	45	212	26	283	41	301	58	400	23	204	21	248	1334
05:15 PM	45	311	24	380	30	188	20	238	33	316	50	399	34	261	16	311	1328
05:30 PM	28	303	27	358	52	214	25	291	26	307	40	373	27	215	32	274	1296
05:45 PM	28	355	20	403	37	208	26	271	21	286	39	346	26	155	19	200	1220
Total	145	1292	107	1544	164	822	97	1083	121	1210	187	1518	110	835	88	1033	5178
Grand Total	289	2424	201	2914	336	1694	189	2219	252	2436	355	3043	220	1675	188	2083	10259
Apprch %	9.9	83.2	6.9		15.1	76.3	8.5		8.3	80.1	11.7		10.6	80.4	9		
Total %	2.8	23.6	2	28.4	3.3	16.5	1.8	21.6	2.5	23.7	3.5	29.7	2.1	16.3	1.8	20.3	

	Crenshaw Boulevard Southbound				Torrance Boulevard Westbound				Crenshaw Boulevard Northbound				Torrance Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**47**	305	27	379	40	**230**	21	**291**	30	**325**	35	390	23	205	26	254	1314
04:45 PM	32	296	24	352	43	216	**28**	287	39	312	41	392	30	208	**27**	265	1296
05:00 PM	44	**323**	**36**	**403**	**45**	212	26	283	**41**	301	**58**	**400**	23	204	21	248	**1334**
05:15 PM	45	311	24	380	30	188	20	238	33	316	50	399	**34**	**261**	16	**311**	1328
Total Volume	168	1235	111	1514	158	846	95	1099	143	1254	184	1581	110	878	90	1078	5272
% App. Total	11.1	81.6	7.3		14.4	77	8.6		9	79.3	11.6		10.2	81.4	8.3		
PHF	.894	.956	.771	.939	.878	.920	.848	.944	.872	.965	.793	.988	.809	.841	.833	.867	.988

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City of Torrance
N/S: Crenshaw Boulevard
E/W: Torrance Boulevard
Weather: Clear

File Name : 11_TOR_Crenshaw_Torrance PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:15 PM				04:30 PM				04:45 PM			
+0 mins.	44	323	**36**	**403**	**48**	209	25	282	30	**325**	35	390	30	208	27	265
+15 mins.	**45**	311	24	380	40	**230**	21	**291**	39	312	41	392	23	204	21	248
+30 mins.	28	303	27	358	43	216	**28**	287	**41**	301	**58**	**400**	**34**	**261**	16	**311**
+45 mins.	28	**355**	20	403	45	212	26	283	33	316	50	399	27	215	**32**	274
Total Volume	145	1292	107	1544	176	867	100	1143	143	1254	184	1581	114	888	96	1098
% App. Total	9.4	83.7	6.9		15.4	75.9	8.7		9	79.3	11.6		10.4	80.9	8.7	
PHF	.806	.910	.743	.958	.917	.942	.893	.982	.872	.965	.793	.988	.838	.851	.750	.883

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City of Torrance
N/S: Hawthorne Boulevard
E/W: Village Lane/Fashion Way
Weather: Clear

File Name : 12_TOR_Hawthorne_Fashion AM
Site Code : 05721690
Start Date : 11/30/2021
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Groups Printed- Total Volume

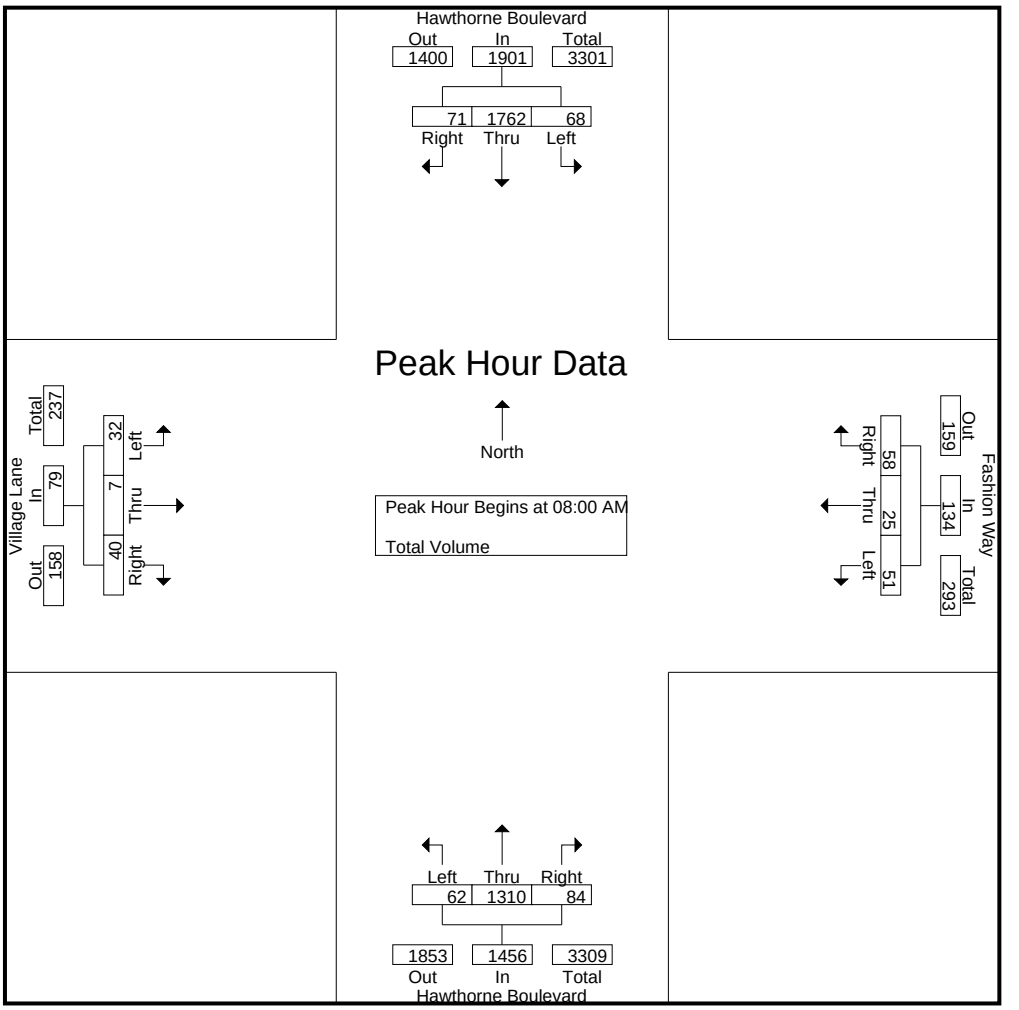
	Hawthorne Boulevard Southbound				Fashion Way Westbound				Hawthorne Boulevard Northbound				Village Lane Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	5	241	5	251	3	0	4	7	8	227	8	243	6	0	1	7	508
07:15 AM	10	326	5	341	5	0	7	12	6	306	8	320	6	3	2	11	684
07:30 AM	8	387	9	404	4	1	7	12	6	273	8	287	6	0	6	12	715
07:45 AM	14	424	3	441	14	3	4	21	5	285	14	304	6	3	8	17	783
Total	37	1378	22	1437	26	4	22	52	25	1091	38	1154	24	6	17	47	2690
08:00 AM	19	465	10	494	8	4	17	29	19	315	20	354	7	3	13	23	900
08:15 AM	14	372	18	404	8	7	13	28	5	306	20	331	6	2	8	16	779
08:30 AM	14	490	25	529	16	8	14	38	15	340	19	374	12	0	9	21	962
08:45 AM	21	435	18	474	19	6	14	39	23	349	25	397	7	2	10	19	929
Total	68	1762	71	1901	51	25	58	134	62	1310	84	1456	32	7	40	79	3570
Grand Total	105	3140	93	3338	77	29	80	186	87	2401	122	2610	56	13	57	126	6260
Apprch %	3.1	94.1	2.8		41.4	15.6	43		3.3	92	4.7		44.4	10.3	45.2		
Total %	1.7	50.2	1.5	53.3	1.2	0.5	1.3	3	1.4	38.4	1.9	41.7	0.9	0.2	0.9	2	

	Hawthorne Boulevard Southbound				Fashion Way Westbound				Hawthorne Boulevard Northbound				Village Lane Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	19	465	10	494	8	4	**17**	29	19	315	20	354	7	**3**	**13**	**23**	900
08:15 AM	14	372	18	404	8	7	13	28	5	306	20	331	6	2	8	16	779
08:30 AM	14	**490**	**25**	**529**	16	**8**	14	38	15	340	19	374	**12**	0	9	21	**962**
08:45 AM	**21**	435	18	474	**19**	6	14	**39**	**23**	**349**	**25**	**397**	7	2	10	19	929
Total Volume	68	1762	71	1901	51	25	58	134	62	1310	84	1456	32	7	40	79	3570
% App. Total	3.6	92.7	3.7		38.1	18.7	43.3		4.3	90	5.8		40.5	8.9	50.6		
PHF	.810	.899	.710	.898	.671	.781	.853	.859	.674	.938	.840	.917	.667	.583	.769	.859	.928

Counts Unlimited, Inc.
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(951)268-6268

City of Torrance
N/S: Hawthorne Boulevard
E/W: Village Lane/Fashion Way
Weather: Clear

File Name : 12_TOR_Hawthorne_Fashion AM
Site Code : 05721690
Start Date : 11/30/2021



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	19	465	10	494	8	4	**17**	29	19	315	20	354	7	**3**	**13**	**23**
+15 mins.	14	372	18	404	8	7	13	28	5	306	20	331	6	2	8	16
+30 mins.	14	**490**	**25**	**529**	16	**8**	14	38	15	340	19	374	**12**	0	9	21
+45 mins.	**21**	435	18	474	**19**	6	14	**39**	**23**	**349**	**25**	**397**	7	2	10	19
Total Volume	68	1762	71	1901	51	25	58	134	62	1310	84	1456	32	7	40	79
% App. Total	3.6	92.7	3.7		38.1	18.7	43.3		4.3	90	5.8		40.5	8.9	50.6	
PHF	.810	.899	.710	.898	.671	.781	.853	.859	.674	.938	.840	.917	.667	.583	.769	.859

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City of Torrance
N/S: Hawthorne Boulevard
E/W: Village Lane/Fashion Way
Weather: Clear

File Name : 12_TOR_Hawthorne_Fashion PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

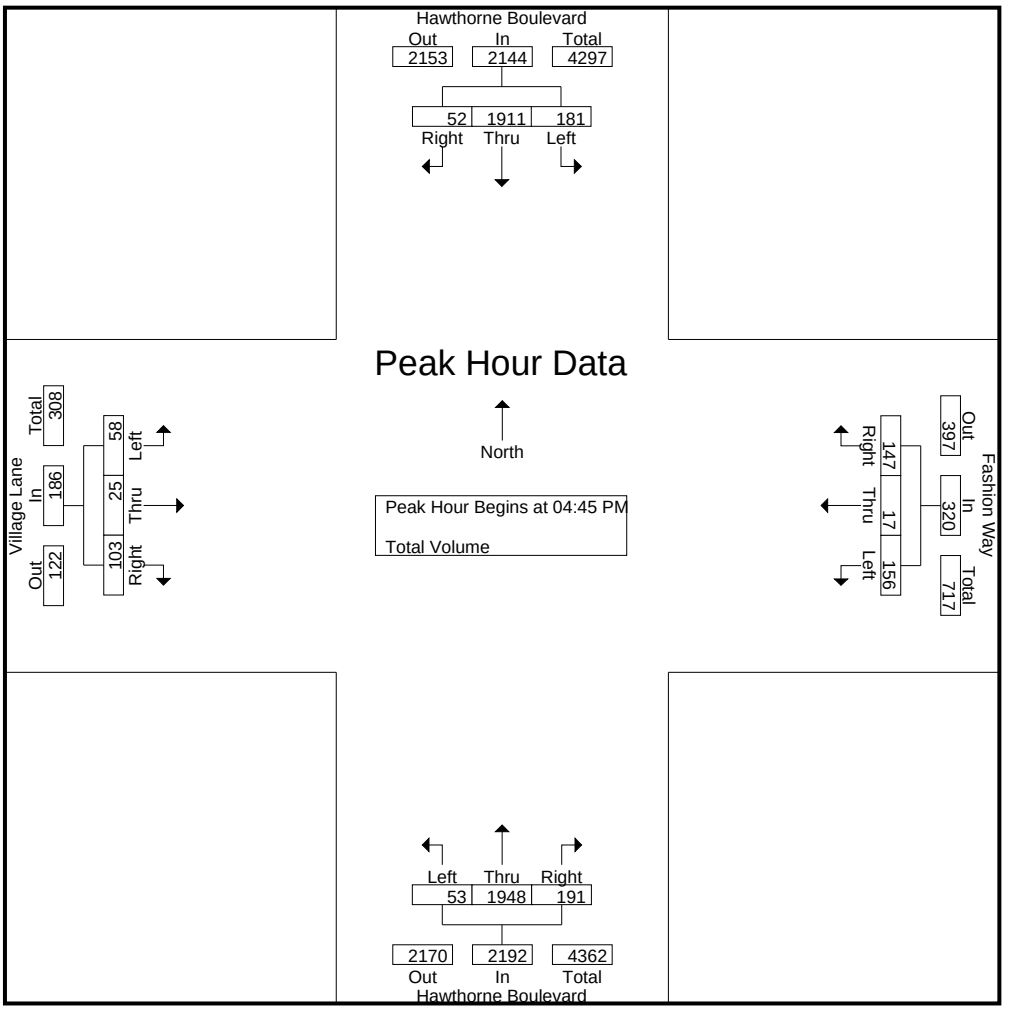
	Hawthorne Boulevard Southbound				Fashion Way Westbound				Hawthorne Boulevard Northbound				Village Lane Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	48	450	11	509	23	3	40	66	21	492	48	561	5	2	22	29	1165
04:15 PM	42	425	24	491	34	7	36	77	16	482	35	533	11	2	16	29	1130
04:30 PM	46	470	14	530	35	15	41	91	22	468	29	519	10	5	23	38	1178
04:45 PM	52	506	15	573	36	4	32	72	9	487	50	546	10	2	27	39	1230
Total	188	1851	64	2103	128	29	149	306	68	1929	162	2159	36	11	88	135	4703
05:00 PM	50	488	14	552	41	6	42	89	12	460	42	514	17	12	37	66	1221
05:15 PM	41	479	11	531	32	3	38	73	16	498	47	561	22	5	13	40	1205
05:30 PM	38	438	12	488	47	4	35	86	16	503	52	571	9	6	26	41	1186
05:45 PM	50	435	6	491	30	8	37	75	14	460	39	513	17	6	22	45	1124
Total	179	1840	43	2062	150	21	152	323	58	1921	180	2159	65	29	98	192	4736
Grand Total	367	3691	107	4165	278	50	301	629	126	3850	342	4318	101	40	186	327	9439
Apprch %	8.8	88.6	2.6		44.2	7.9	47.9		2.9	89.2	7.9		30.9	12.2	56.9		
Total %	3.9	39.1	1.1	44.1	2.9	0.5	3.2	6.7	1.3	40.8	3.6	45.7	1.1	0.4	2	3.5	

	Hawthorne Boulevard Southbound				Fashion Way Westbound				Hawthorne Boulevard Northbound				Village Lane Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**52**	**506**	**15**	**573**	36	4	32	72	9	487	50	546	10	2	27	39	**1230**
05:00 PM	50	488	14	552	41	**6**	**42**	**89**	12	460	42	514	17	**12**	**37**	**66**	1221
05:15 PM	41	479	11	531	32	3	38	73	**16**	498	47	561	**22**	5	13	40	1205
05:30 PM	38	438	12	488	**47**	4	35	86	16	**503**	**52**	**571**	9	6	26	41	1186
Total Volume	181	1911	52	2144	156	17	147	320	53	1948	191	2192	58	25	103	186	4842
% App. Total	8.4	89.1	2.4		48.8	5.3	45.9		2.4	88.9	8.7		31.2	13.4	55.4		
PHF	.870	.944	.867	.935	.830	.708	.875	.899	.828	.968	.918	.960	.659	.521	.696	.705	.984

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City of Torrance
N/S: Hawthorne Boulevard
E/W: Village Lane/Fashion Way
Weather: Clear

File Name : 12_TOR_Hawthorne_Fashion PM
Site Code : 05721690
Start Date : 11/30/2021



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:15 PM				04:45 PM				05:00 PM			
+0 mins.	46	470	14	530	34	7	36	77	9	487	50	546	17	**12**	**37**	**66**
+15 mins.	**52**	**506**	**15**	**573**	35	**15**	41	**91**	12	460	42	514	**22**	5	13	40
+30 mins.	50	488	14	552	36	4	32	72	**16**	498	47	561	9	6	26	41
+45 mins.	41	479	11	531	**41**	6	**42**	89	16	**503**	**52**	**571**	17	6	22	45
Total Volume	189	1943	54	2186	146	32	151	329	53	1948	191	2192	65	29	98	192
% App. Total	8.6	88.9	2.5		44.4	9.7	45.9		2.4	88.9	8.7		33.9	15.1	51	
PHF	.909	.960	.900	.954	.890	.533	.899	.904	.828	.968	.918	.960	.739	.604	.662	.727

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City of Torrance
N/S: Madrona Avenue
E/W: Fashion Way
Weather: Clear

File Name : 13_TOR_Madrona_Fashion AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

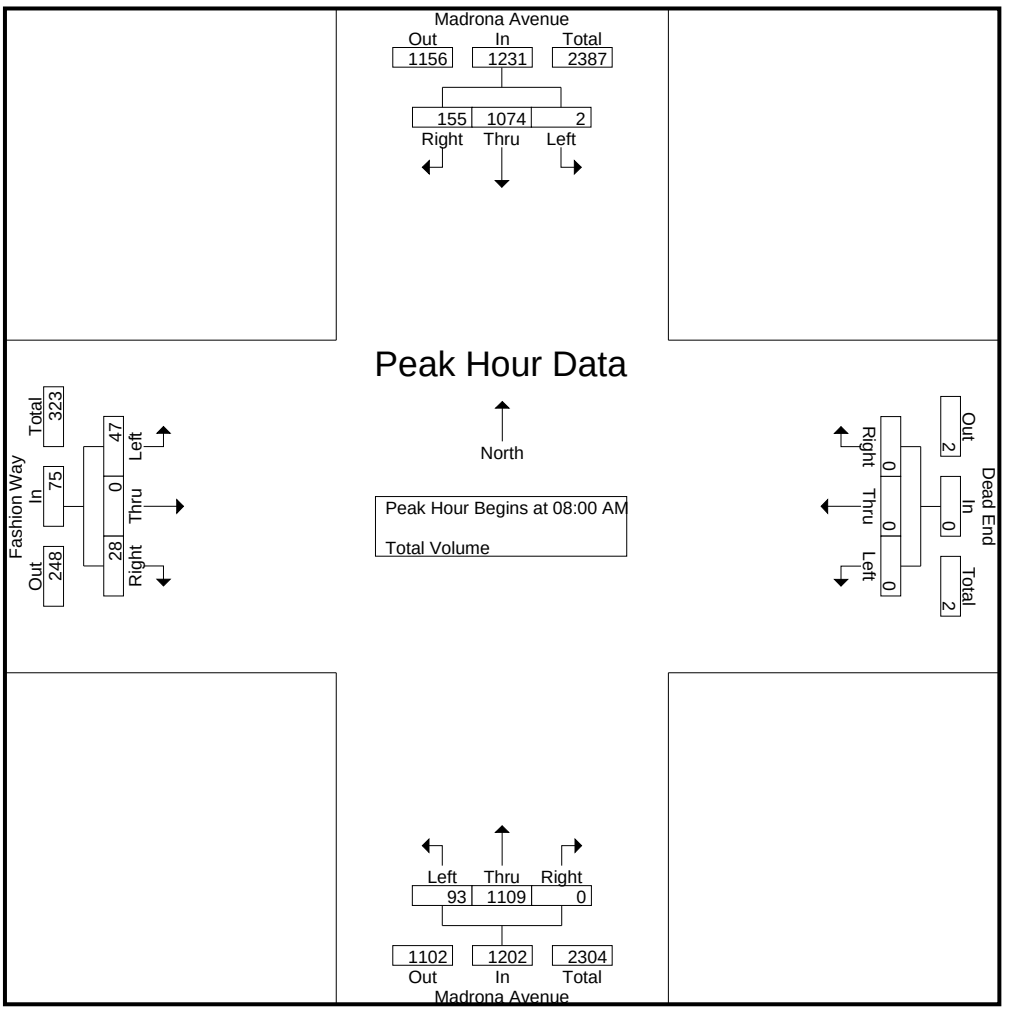
	Madrona Avenue Southbound				Dead End Westbound				Madrona Avenue Northbound				Fashion Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	109	17	126	0	0	0	0	7	170	0	177	12	0	6	18	321
07:15 AM	0	137	15	152	0	0	0	0	8	199	0	207	0	0	5	5	364
07:30 AM	0	223	18	241	0	0	0	0	9	272	0	281	11	0	6	17	539
07:45 AM	1	200	34	235	0	0	0	0	14	241	0	255	10	0	4	14	504
Total	1	669	84	754	0	0	0	0	38	882	0	920	33	0	21	54	1728
08:00 AM	0	225	52	277	0	0	0	0	27	269	0	296	12	0	8	20	593
08:15 AM	1	296	29	326	0	0	0	0	22	232	0	254	8	0	6	14	594
08:30 AM	1	225	30	256	0	0	0	0	24	285	0	309	14	0	5	19	584
08:45 AM	0	328	44	372	0	0	0	0	20	323	0	343	13	0	9	22	737
Total	2	1074	155	1231	0	0	0	0	93	1109	0	1202	47	0	28	75	2508
Grand Total	3	1743	239	1985	0	0	0	0	131	1991	0	2122	80	0	49	129	4236
Apprch %	0.2	87.8	12		0	0	0		6.2	93.8	0		62	0	38		
Total %	0.1	41.1	5.6	46.9	0	0	0	0	3.1	47	0	50.1	1.9	0	1.2	3	

	Madrona Avenue Southbound				Dead End Westbound				Madrona Avenue Northbound				Fashion Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	225	**52**	277	0	0	0	0	**27**	269	0	296	12	0	8	20	593
08:15 AM	**1**	296	29	326	0	0	0	0	22	232	0	254	8	0	6	14	594
08:30 AM	1	225	30	256	0	0	0	0	24	285	0	309	**14**	0	5	19	584
08:45 AM	0	**328**	44	**372**	0	0	0	0	20	**323**	0	**343**	13	0	**9**	**22**	**737**
Total Volume	2	1074	155	1231	0	0	0	0	93	1109	0	1202	47	0	28	75	2508
% App. Total	0.2	87.2	12.6		0	0	0		7.7	92.3	0		62.7	0	37.3		
PHF	.500	.819	.745	.827	.000	.000	.000	.000	.861	.858	.000	.876	.839	.000	.778	.852	.851

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City of Torrance
N/S: Madrona Avenue
E/W: Fashion Way
Weather: Clear

File Name : 13_TOR_Madrona_Fashion AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				07:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	225	**52**	277	0	0	0	0	**27**	269	0	296	12	0	8	20
+15 mins.	**1**	296	29	326	0	0	0	0	22	232	0	254	8	0	6	14
+30 mins.	1	225	30	256	0	0	0	0	24	285	0	309	**14**	0	5	19
+45 mins.	0	**328**	44	**372**	0	0	0	0	20	**323**	0	**343**	13	0	**9**	**22**
Total Volume	2	1074	155	1231	0	0	0	0	93	1109	0	1202	47	0	28	75
% App. Total	0.2	87.2	12.6		0	0	0		7.7	92.3	0		62.7	0	37.3	
PHF	.500	.819	.745	.827	.000	.000	.000	.000	.861	.858	.000	.876	.839	.000	.778	.852

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City of Torrance
N/S: Madrona Avenue
E/W: Fashion Way
Weather: Clear

File Name : 13_TOR_Madrona_Fashion PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

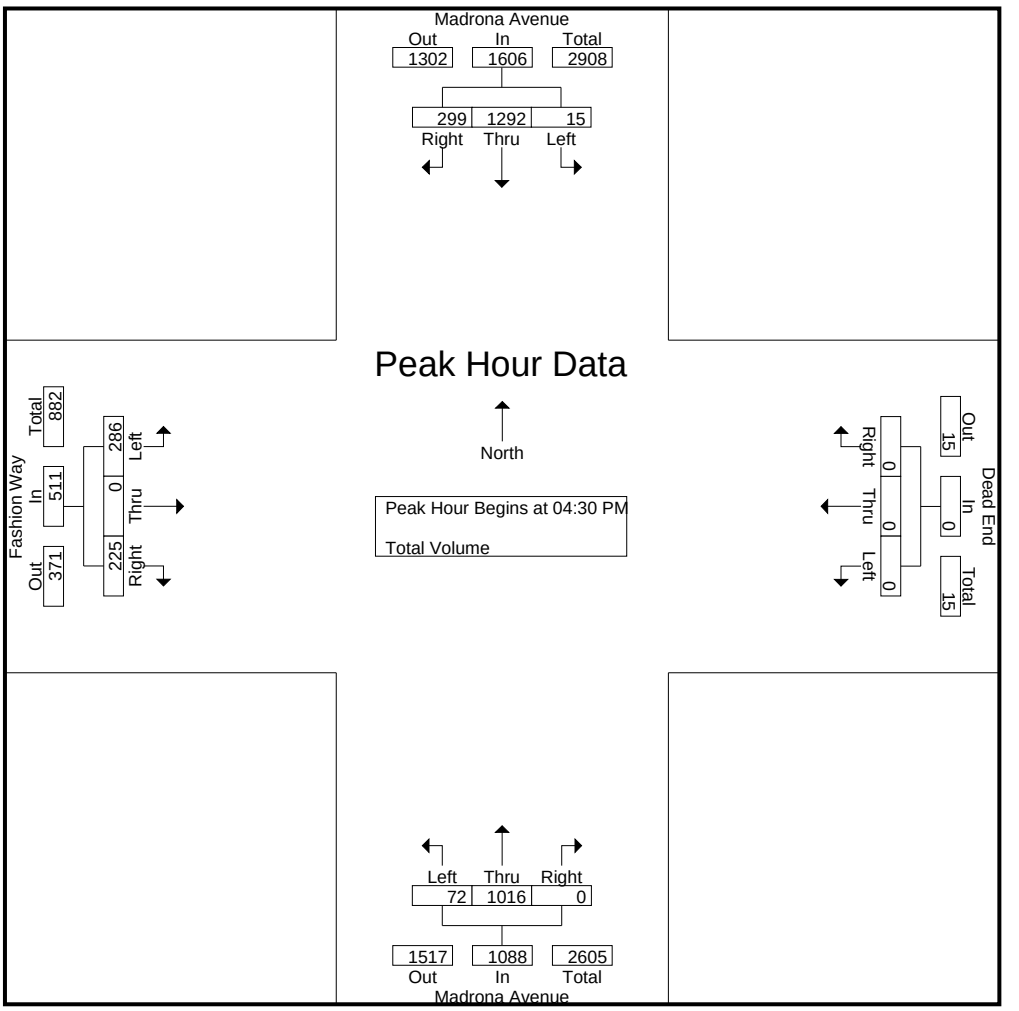
	Madrona Avenue Southbound				Dead End Westbound				Madrona Avenue Northbound				Fashion Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	4	325	65	394	0	0	0	0	33	277	0	310	62	0	40	102	806
04:15 PM	2	282	69	353	0	0	0	0	24	278	0	302	46	0	39	85	740
04:30 PM	5	299	65	369	0	0	0	0	12	237	0	249	71	0	57	128	746
04:45 PM	6	307	76	389	0	0	0	0	20	265	0	285	61	0	47	108	782
Total	17	1213	275	1505	0	0	0	0	89	1057	0	1146	240	0	183	423	3074
05:00 PM	3	375	68	446	0	0	0	0	19	271	0	290	85	0	67	152	888
05:15 PM	1	311	90	402	0	0	0	0	21	243	0	264	69	0	54	123	789
05:30 PM	1	290	67	358	0	0	0	0	19	240	0	259	68	0	45	113	730
05:45 PM	2	285	76	363	0	0	0	0	24	245	0	269	60	0	34	94	726
Total	7	1261	301	1569	0	0	0	0	83	999	0	1082	282	0	200	482	3133
Grand Total	24	2474	576	3074	0	0	0	0	172	2056	0	2228	522	0	383	905	6207
Apprch %	0.8	80.5	18.7		0	0	0		7.7	92.3	0		57.7	0	42.3		
Total %	0.4	39.9	9.3	49.5	0	0	0	0	2.8	33.1	0	35.9	8.4	0	6.2	14.6	

	Madrona Avenue Southbound				Dead End Westbound				Madrona Avenue Northbound				Fashion Way Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	5	299	65	369	0	0	0	0	12	237	0	249	71	0	57	128	746
04:45 PM	**6**	307	76	389	0	0	0	0	20	265	0	285	61	0	47	108	782
05:00 PM	3	**375**	68	**446**	0	0	0	0	19	**271**	0	**290**	**85**	0	**67**	**152**	**888**
05:15 PM	1	311	**90**	402	0	0	0	0	**21**	243	0	264	69	0	54	123	789
Total Volume	15	1292	299	1606	0	0	0	0	72	1016	0	1088	286	0	225	511	3205
% App. Total	0.9	80.4	18.6		0	0	0		6.6	93.4	0		56	0	44		
PHF	.625	.861	.831	.900	.000	.000	.000	.000	.857	.937	.000	.938	.841	.000	.840	.840	.902

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City of Torrance
N/S: Madrona Avenue
E/W: Fashion Way
Weather: Clear

File Name : 13_TOR_Madrona_Fashion PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:00 PM				04:00 PM				04:30 PM			
+0 mins.	5	299	65	369	0	0	0	0	**33**	277	0	**310**	71	0	57	128
+15 mins.	**6**	307	76	389	0	0	0	0	24	**278**	0	302	61	0	47	108
+30 mins.	3	**375**	68	**446**	0	0	0	0	12	237	0	249	**85**	0	**67**	**152**
+45 mins.	1	311	**90**	402	0	0	0	0	20	265	0	285	69	0	54	123
Total Volume	15	1292	299	1606	0	0	0	0	89	1057	0	1146	286	0	225	511
% App. Total	0.9	80.4	18.6		0	0	0		7.8	92.2	0		56	0	44	
PHF	.625	.861	.831	.900	.000	.000	.000	.000	.674	.951	.000	.924	.841	.000	.840	.840

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City of Torrance
N/S: Anza Avenue
E/W: Carson Street
Weather: Clear

File Name : 14_TOR_Anza_Carson AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

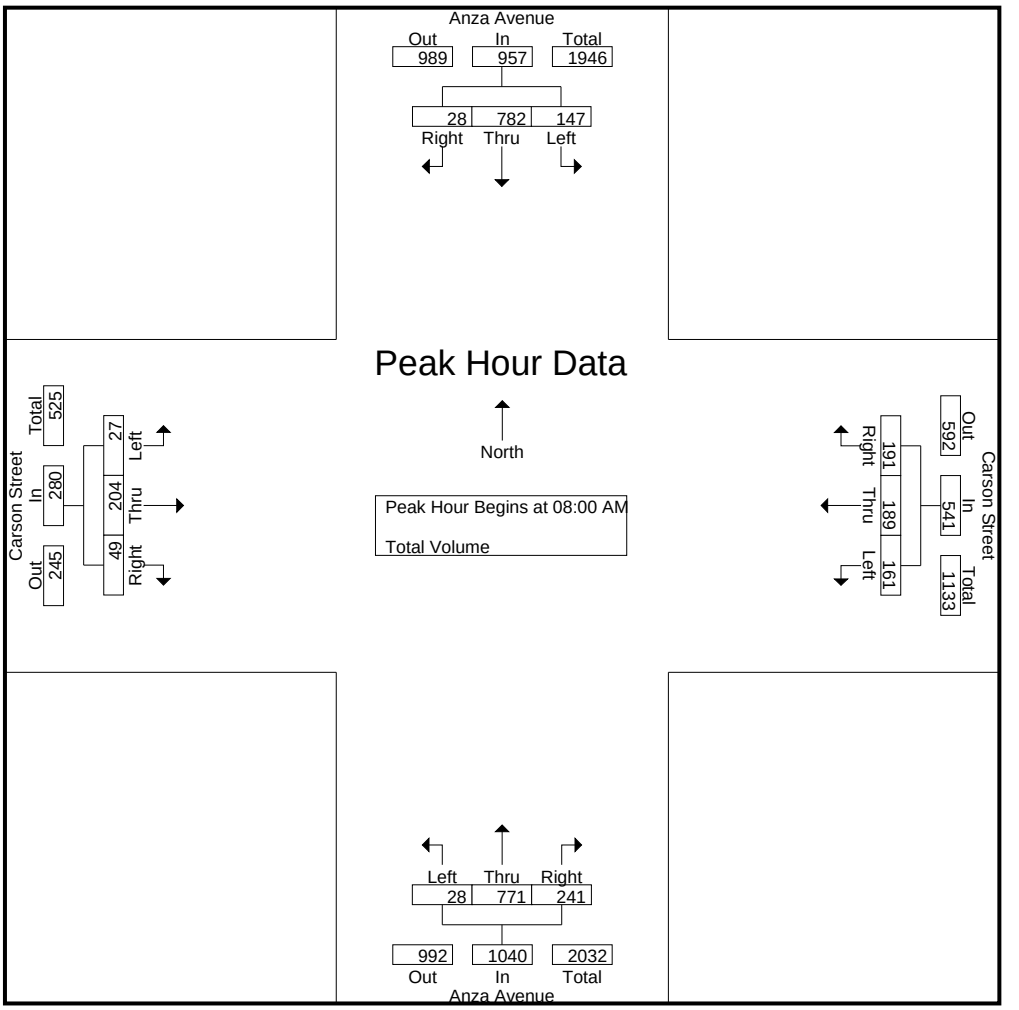
	Anza Avenue Southbound				Carson Street Westbound				Anza Avenue Northbound				Carson Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	11	74	2	87	21	27	15	63	5	113	26	144	4	17	3	24	318
07:15 AM	19	76	1	96	16	26	27	69	3	149	27	179	4	31	8	43	387
07:30 AM	26	149	4	179	19	52	38	109	6	192	51	249	7	46	13	66	603
07:45 AM	33	198	4	235	37	42	36	115	4	193	55	252	6	44	13	63	665
Total	89	497	11	597	93	147	116	356	18	647	159	824	21	138	37	196	1973
08:00 AM	29	158	4	191	24	23	29	76	4	161	67	232	3	50	9	62	561
08:15 AM	33	196	9	238	37	49	47	133	4	173	60	237	7	42	7	56	664
08:30 AM	34	206	6	246	55	65	70	190	19	211	47	277	7	56	13	76	789
08:45 AM	51	222	9	282	45	52	45	142	1	226	67	294	10	56	20	86	804
Total	147	782	28	957	161	189	191	541	28	771	241	1040	27	204	49	280	2818
Grand Total	236	1279	39	1554	254	336	307	897	46	1418	400	1864	48	342	86	476	4791
Apprch %	15.2	82.3	2.5		28.3	37.5	34.2		2.5	76.1	21.5		10.1	71.8	18.1		
Total %	4.9	26.7	0.8	32.4	5.3	7	6.4	18.7	1	29.6	8.3	38.9	1	7.1	1.8	9.9	

	Anza Avenue Southbound				Carson Street Westbound				Anza Avenue Northbound				Carson Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	29	158	4	191	24	23	29	76	4	161	**67**	232	3	50	9	62	561
08:15 AM	33	196	**9**	238	37	49	47	133	4	173	60	237	7	42	7	56	664
08:30 AM	34	206	6	246	**55**	**65**	**70**	**190**	**19**	211	47	277	7	**56**	13	76	789
08:45 AM	**51**	**222**	9	**282**	45	52	45	142	1	**226**	67	**294**	**10**	56	**20**	**86**	**804**
Total Volume	147	782	28	957	161	189	191	541	28	771	241	1040	27	204	49	280	2818
% App. Total	15.4	81.7	2.9		29.8	34.9	35.3		2.7	74.1	23.2		9.6	72.9	17.5		
PHF	.721	.881	.778	.848	.732	.727	.682	.712	.368	.853	.899	.884	.675	.911	.613	.814	.876

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City of Torrance
N/S: Anza Avenue
E/W: Carson Street
Weather: Clear

File Name : 14_TOR_Anza_Carson AM
Site Code : 05721690
Start Date : 11/30/2021



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	29	158	4	191	24	23	29	76	4	161	**67**	232	3	50	9	62
+15 mins.	33	196	**9**	238	37	49	47	133	4	173	60	237	7	42	7	56
+30 mins.	34	206	6	246	**55**	**65**	**70**	**190**	**19**	211	47	277	7	**56**	13	76
+45 mins.	**51**	**222**	9	**282**	45	52	45	142	1	**226**	67	**294**	**10**	56	**20**	**86**
Total Volume	147	782	28	957	161	189	191	541	28	771	241	1040	27	204	49	280
% App. Total	15.4	81.7	2.9		29.8	34.9	35.3		2.7	74.1	23.2		9.6	72.9	17.5	
PHF	.721	.881	.778	.848	.732	.727	.682	.712	.368	.853	.899	.884	.675	.911	.613	.814

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City of Torrance
N/S: Anza Avenue
E/W: Carson Street
Weather: Clear

File Name : 14_TOR_Anza_Carson PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

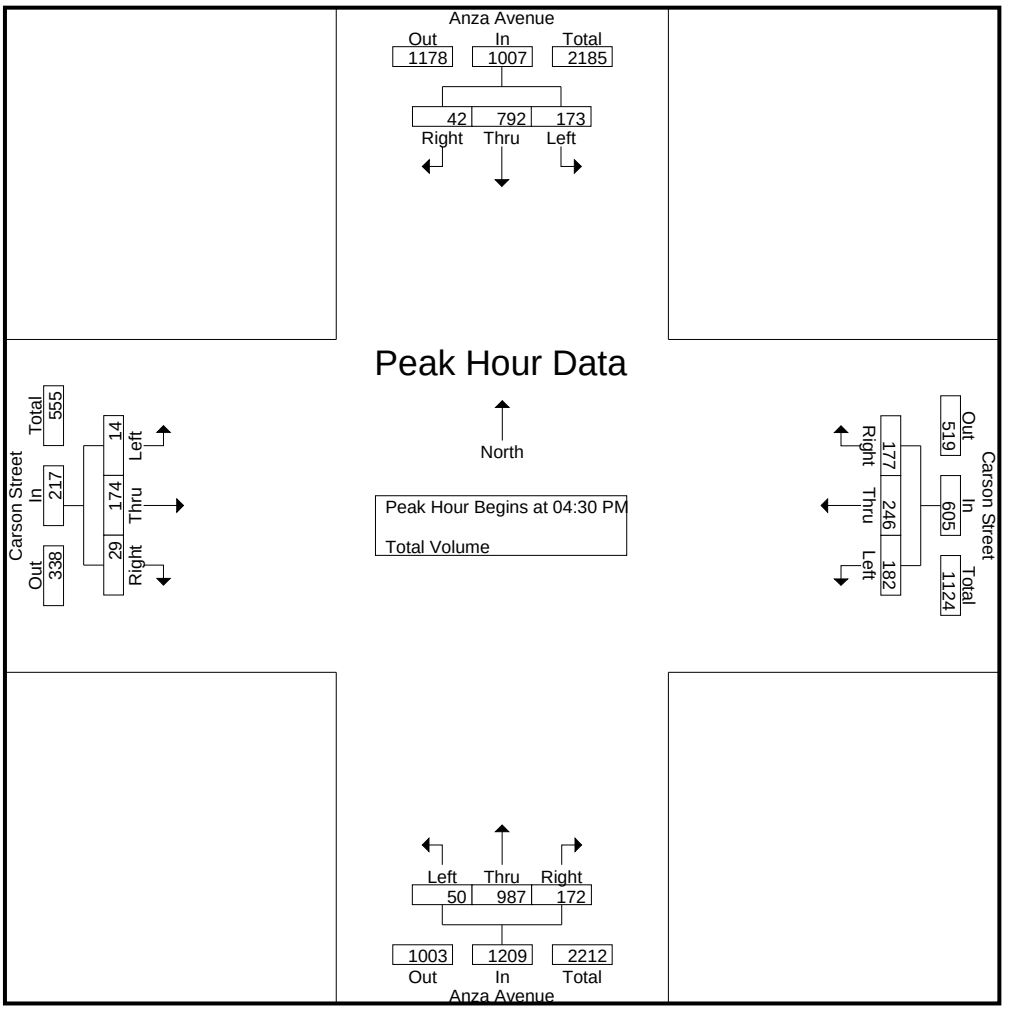
	Anza Avenue Southbound				Carson Street Westbound				Anza Avenue Northbound				Carson Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	52	195	9	256	51	48	54	153	7	229	34	270	4	55	5	64	743
04:15 PM	32	238	7	277	52	41	31	124	7	234	44	285	3	38	9	50	736
04:30 PM	42	188	7	237	53	66	45	164	11	254	40	305	5	45	8	58	764
04:45 PM	48	208	12	268	48	55	34	137	14	243	53	310	6	37	8	51	766
Total	174	829	35	1038	204	210	164	578	39	960	171	1170	18	175	30	223	3009
05:00 PM	35	193	7	235	50	74	52	176	15	226	44	285	1	41	9	51	747
05:15 PM	48	203	16	267	31	51	46	128	10	264	35	309	2	51	4	57	761
05:30 PM	35	237	11	283	48	54	47	149	13	223	40	276	3	36	6	45	753
05:45 PM	35	238	8	281	43	59	39	141	8	214	35	257	4	37	10	51	730
Total	153	871	42	1066	172	238	184	594	46	927	154	1127	10	165	29	204	2991
Grand Total	327	1700	77	2104	376	448	348	1172	85	1887	325	2297	28	340	59	427	6000
Apprch %	15.5	80.8	3.7		32.1	38.2	29.7		3.7	82.2	14.1		6.6	79.6	13.8		
Total %	5.4	28.3	1.3	35.1	6.3	7.5	5.8	19.5	1.4	31.5	5.4	38.3	0.5	5.7	1	7.1	

	Anza Avenue Southbound				Carson Street Westbound				Anza Avenue Northbound				Carson Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	42	188	7	237	**53**	66	45	164	11	254	40	305	5	45	8	**58**	764
04:45 PM	**48**	**208**	12	**268**	48	55	34	137	14	243	**53**	**310**	**6**	37	8	51	**766**
05:00 PM	35	193	7	235	50	**74**	**52**	**176**	**15**	226	44	285	1	41	**9**	51	747
05:15 PM	48	203	**16**	267	31	51	46	128	10	**264**	35	309	2	**51**	4	57	761
Total Volume	173	792	42	1007	182	246	177	605	50	987	172	1209	14	174	29	217	3038
% App. Total	17.2	78.6	4.2		30.1	40.7	29.3		4.1	81.6	14.2		6.5	80.2	13.4		
PHF	.901	.952	.656	.939	.858	.831	.851	.859	.833	.935	.811	.975	.583	.853	.806	.935	.992

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City of Torrance
N/S: Anza Avenue
E/W: Carson Street
Weather: Clear

File Name : 14_TOR_Anza_Carson PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:30 PM				04:30 PM				04:00 PM			
+0 mins.	35	193	7	235	**53**	66	45	164	11	254	40	305	4	**55**	5	**64**
+15 mins.	**48**	203	**16**	267	48	55	34	137	14	243	**53**	**310**	3	38	**9**	50
+30 mins.	35	237	11	**283**	50	**74**	**52**	**176**	**15**	226	44	285	5	45	8	58
+45 mins.	35	**238**	8	281	31	51	46	128	10	**264**	35	309	**6**	37	8	51
Total Volume	153	871	42	1066	182	246	177	605	50	987	172	1209	18	175	30	223
% App. Total	14.4	81.7	3.9		30.1	40.7	29.3		4.1	81.6	14.2		8.1	78.5	13.5	
PHF	.797	.915	.656	.942	.858	.831	.851	.859	.833	.935	.811	.975	.750	.795	.833	.871

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City of Torrance
N/S: Hawthorne Boulevard
E/W: Carson Street
Weather: Clear

File Name : 15_TOR_Hawthorne_Carson AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

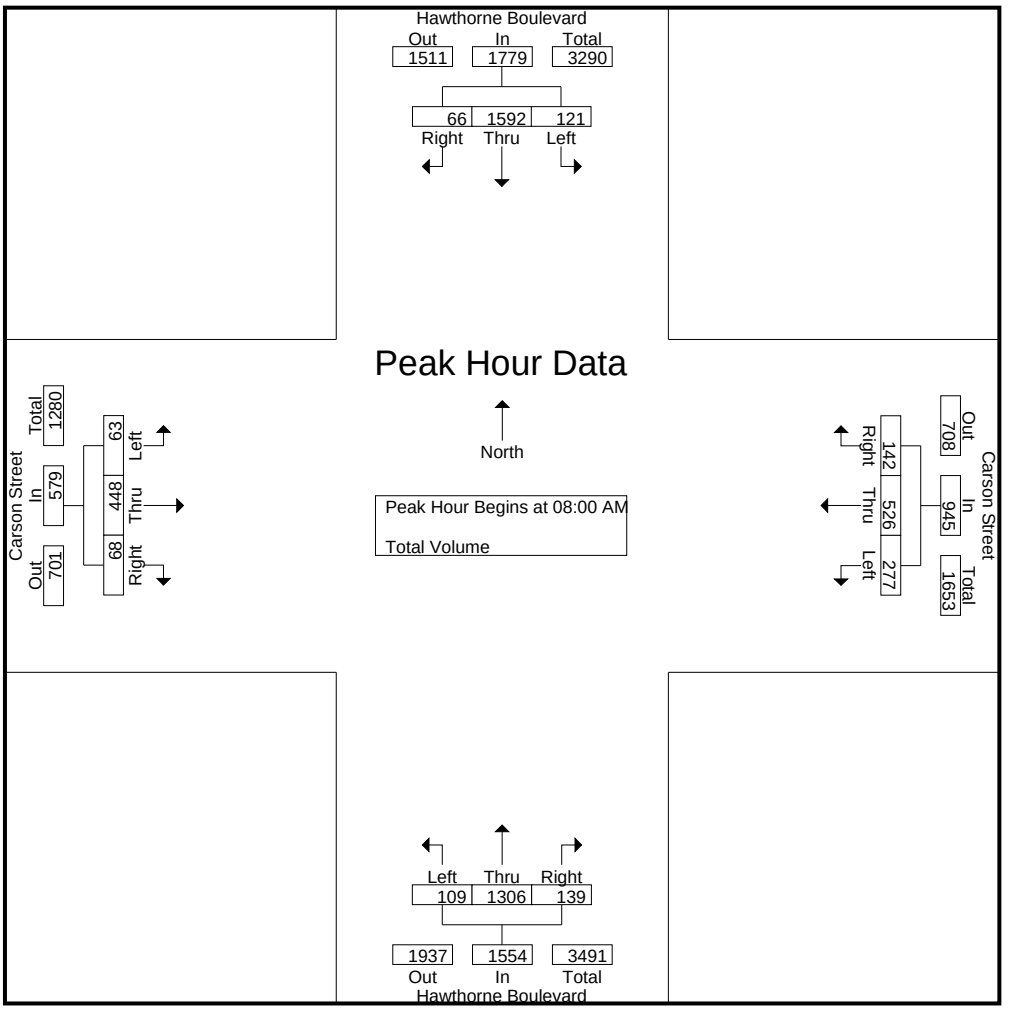
	Hawthorne Boulevard Southbound				Carson Street Westbound				Hawthorne Boulevard Northbound				Carson Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	24	218	5	247	23	56	27	106	13	216	12	241	11	48	2	61	655
07:15 AM	20	259	12	291	27	71	25	123	13	282	24	319	4	66	5	75	808
07:30 AM	28	343	13	384	31	121	26	178	12	262	25	299	10	104	15	129	990
07:45 AM	25	411	13	449	64	115	30	209	12	293	28	333	16	97	16	129	1120
Total	97	1231	43	1371	145	363	108	616	50	1053	89	1192	41	315	38	394	3573
08:00 AM	36	393	15	444	74	110	36	220	26	291	30	347	17	113	20	150	1161
08:15 AM	27	349	6	382	74	141	31	246	20	301	38	359	13	106	13	132	1119
08:30 AM	23	458	23	504	68	140	42	250	20	343	36	399	12	96	18	126	1279
08:45 AM	35	392	22	449	61	135	33	229	43	371	35	449	21	133	17	171	1298
Total	121	1592	66	1779	277	526	142	945	109	1306	139	1554	63	448	68	579	4857
Grand Total	218	2823	109	3150	422	889	250	1561	159	2359	228	2746	104	763	106	973	8430
Apprch %	6.9	89.6	3.5		27	57	16		5.8	85.9	8.3		10.7	78.4	10.9		
Total %	2.6	33.5	1.3	37.4	5	10.5	3	18.5	1.9	28	2.7	32.6	1.2	9.1	1.3	11.5	

	Hawthorne Boulevard Southbound				Carson Street Westbound				Hawthorne Boulevard Northbound				Carson Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	**36**	393	15	444	**74**	110	36	220	26	291	30	347	17	113	**20**	150	1161
08:15 AM	27	349	6	382	74	**141**	31	246	20	301	**38**	359	13	106	13	132	1119
08:30 AM	23	**458**	**23**	**504**	68	140	**42**	**250**	20	343	36	399	12	96	18	126	1279
08:45 AM	35	392	22	449	61	135	33	229	**43**	**371**	35	**449**	**21**	**133**	17	**171**	**1298**
Total Volume	121	1592	66	1779	277	526	142	945	109	1306	139	1554	63	448	68	579	4857
% App. Total	6.8	89.5	3.7		29.3	55.7	15		7	84	8.9		10.9	77.4	11.7		
PHF	.840	.869	.717	.882	.936	.933	.845	.945	.634	.880	.914	.865	.750	.842	.850	.846	.935

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City of Torrance
N/S: Hawthorne Boulevard
E/W: Carson Street
Weather: Clear

File Name : 15_TOR_Hawthorne_Carson AM
Site Code : 05721690
Start Date : 11/30/2021
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	25	411	13	449	**74**	110	36	220	26	291	30	347	17	113	**20**	150
+15 mins.	**36**	393	15	444	74	**141**	31	246	20	301	**38**	359	13	106	13	132
+30 mins.	27	349	6	382	68	140	**42**	**250**	20	343	36	399	12	96	18	126
+45 mins.	23	**458**	**23**	**504**	61	135	33	229	**43**	**371**	35	**449**	**21**	**133**	17	**171**
Total Volume	111	1611	57	1779	277	526	142	945	109	1306	139	1554	63	448	68	579
% App. Total	6.2	90.6	3.2		29.3	55.7	15		7	84	8.9		10.9	77.4	11.7	
PHF	.771	.879	.620	.882	.936	.933	.845	.945	.634	.880	.914	.865	.750	.842	.850	.846

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City of Torrance
N/S: Hawthorne Boulevard
E/W: Carson Street
Weather: Clear

File Name : 15_TOR_Hawthorne_Carson PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

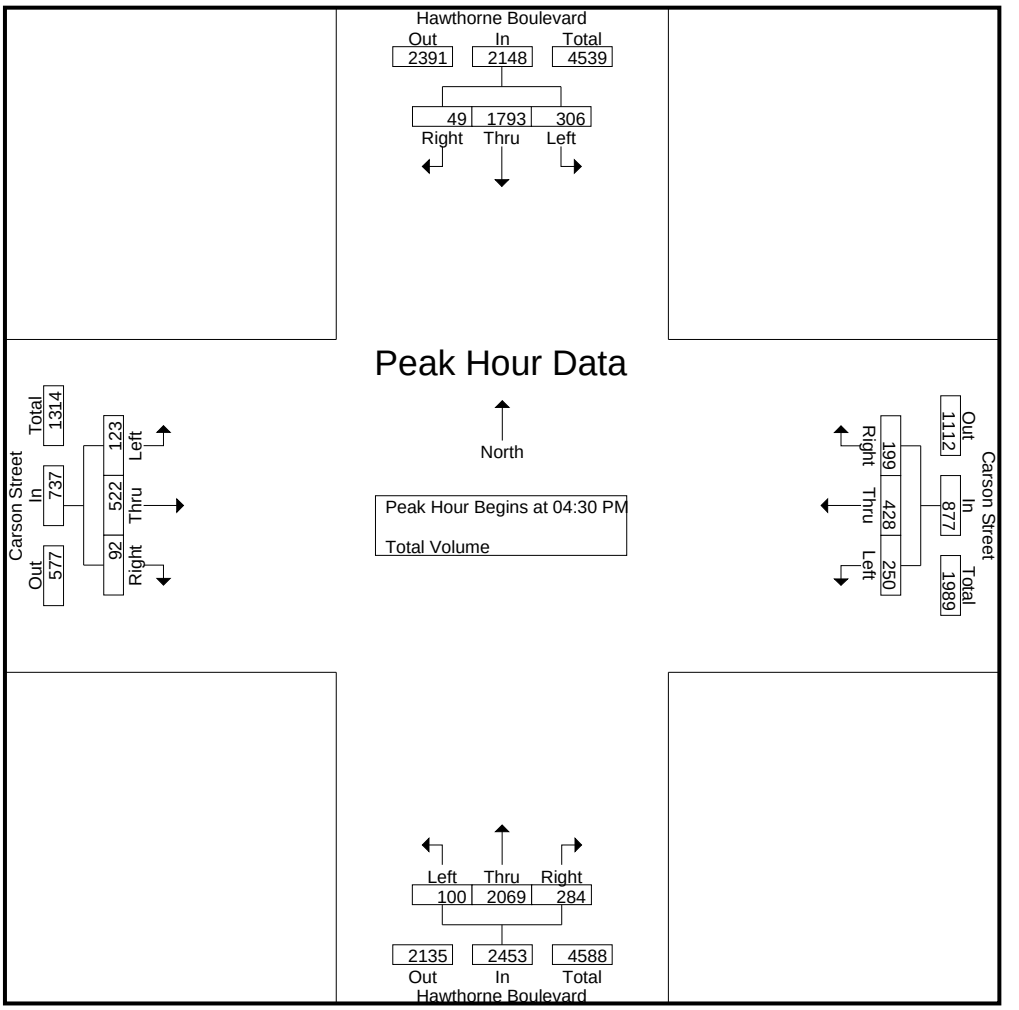
	Hawthorne Boulevard Southbound				Carson Street Westbound				Hawthorne Boulevard Northbound				Carson Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	69	414	18	501	65	102	67	234	28	504	80	612	30	144	25	199	1546
04:15 PM	68	372	16	456	62	100	56	218	26	473	82	581	28	118	30	176	1431
04:30 PM	76	404	19	499	56	120	50	226	27	533	82	642	28	126	23	177	1544
04:45 PM	81	480	9	570	63	104	39	206	21	534	64	619	25	117	26	168	1563
Total	294	1670	62	2026	246	426	212	884	102	2044	308	2454	111	505	104	720	6084
05:00 PM	82	484	12	578	68	112	54	234	29	506	61	596	30	143	23	196	1604
05:15 PM	67	425	9	501	63	92	56	211	23	496	77	596	40	136	20	196	1504
05:30 PM	89	386	19	494	53	107	64	224	23	437	76	536	30	133	23	186	1440
05:45 PM	57	392	13	462	67	107	52	226	20	408	78	506	28	126	22	176	1370
Total	295	1687	53	2035	251	418	226	895	95	1847	292	2234	128	538	88	754	5918
Grand Total	589	3357	115	4061	497	844	438	1779	197	3891	600	4688	239	1043	192	1474	12002
Apprch %	14.5	82.7	2.8		27.9	47.4	24.6		4.2	83	12.8		16.2	70.8	13		
Total %	4.9	28	1	33.8	4.1	7	3.6	14.8	1.6	32.4	5	39.1	2	8.7	1.6	12.3	

	Hawthorne Boulevard Southbound				Carson Street Westbound				Hawthorne Boulevard Northbound				Carson Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	76	404	**19**	499	56	**120**	50	226	27	533	**82**	**642**	28	126	23	177	1544
04:45 PM	81	480	9	570	63	104	39	206	21	**534**	64	619	25	117	**26**	168	1563
05:00 PM	**82**	**484**	12	**578**	**68**	112	54	**234**	**29**	506	61	596	30	**143**	23	**196**	**1604**
05:15 PM	67	425	9	501	63	92	**56**	211	23	496	77	596	**40**	136	20	196	1504
Total Volume	306	1793	49	2148	250	428	199	877	100	2069	284	2453	123	522	92	737	6215
% App. Total	14.2	83.5	2.3		28.5	48.8	22.7		4.1	84.3	11.6		16.7	70.8	12.5		
PHF	.933	.926	.645	.929	.919	.892	.888	.937	.862	.969	.866	.955	.769	.913	.885	.940	.969

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City of Torrance
N/S: Hawthorne Boulevard
E/W: Carson Street
Weather: Clear

File Name : 15_TOR_Hawthorne_Carson PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				05:00 PM				04:00 PM				05:00 PM			
+0 mins.	76	404	**19**	499	**68**	**112**	54	**234**	**28**	504	80	612	30	**143**	**23**	**196**
+15 mins.	81	480	9	570	63	92	56	211	26	473	**82**	581	**40**	136	20	196
+30 mins.	**82**	**484**	12	**578**	53	107	**64**	224	27	533	82	**642**	30	133	23	186
+45 mins.	67	425	9	501	67	107	52	226	21	**534**	64	619	28	126	22	176
Total Volume	306	1793	49	2148	251	418	226	895	102	2044	308	2454	128	538	88	754
% App. Total	14.2	83.5	2.3		28	46.7	25.3		4.2	83.3	12.6		17	71.4	11.7	
PHF	.933	.926	.645	.929	.923	.933	.883	.956	.911	.957	.939	.956	.800	.941	.957	.962

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City of Torrance
N/S: Del Amo Circle East
E/W: Carson Street
Weather: Clear

File Name : 16_TOR_Del Amo Cir_Carson AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

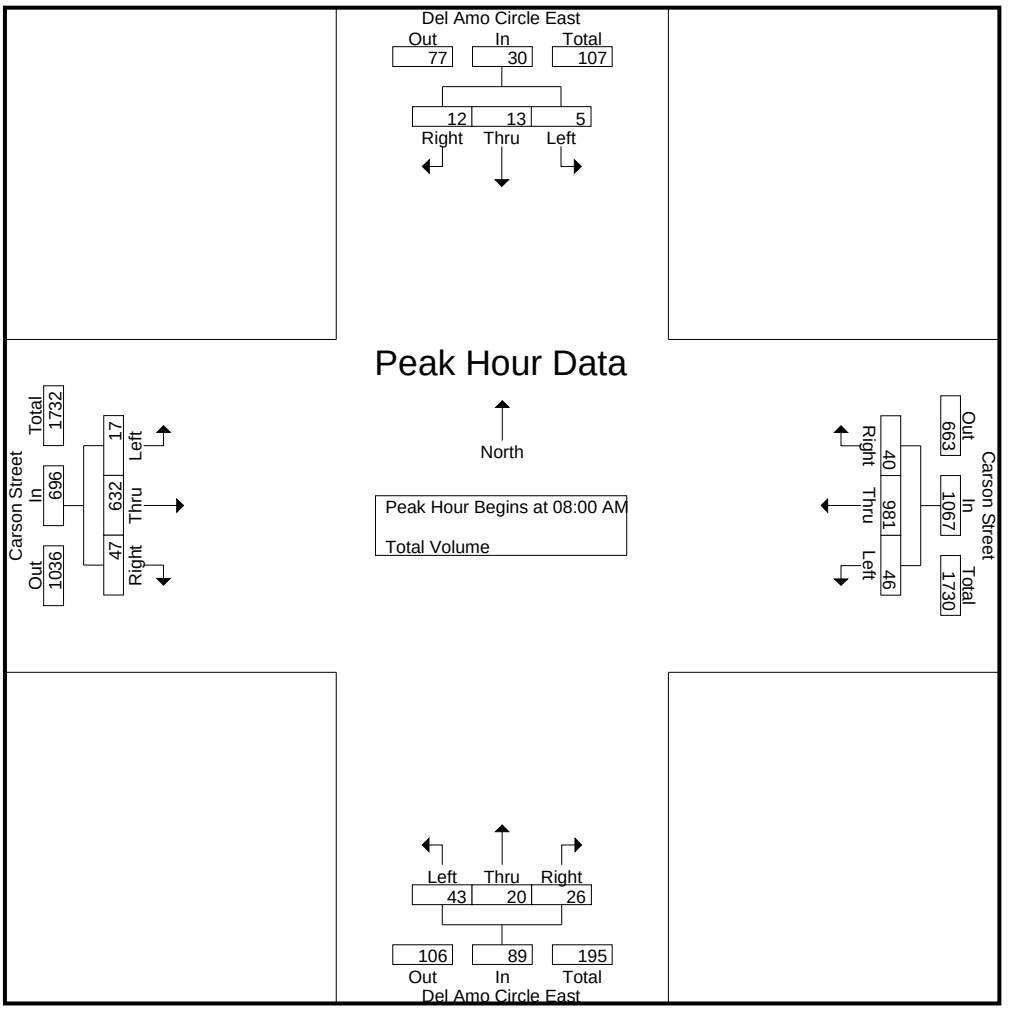
	Del Amo Circle East Southbound				Carson Street Westbound				Del Amo Circle East Northbound				Carson Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	1	3	5	19	94	7	120	1	1	1	3	4	69	4	77	205
07:15 AM	0	2	2	4	14	132	4	150	5	1	4	10	3	92	9	104	268
07:30 AM	1	4	2	7	12	189	7	208	10	8	7	25	2	125	5	132	372
07:45 AM	3	0	2	5	13	200	13	226	11	5	2	18	4	144	9	157	406
Total	5	7	9	21	58	615	31	704	27	15	14	56	13	430	27	470	1251
08:00 AM	2	5	5	12	9	210	8	227	12	4	5	21	6	151	12	169	429
08:15 AM	0	3	1	4	10	267	11	288	7	8	5	20	2	155	6	163	475
08:30 AM	1	4	4	9	13	265	11	289	16	2	9	27	1	131	10	142	467
08:45 AM	2	1	2	5	14	239	10	263	8	6	7	21	8	195	19	222	511
Total	5	13	12	30	46	981	40	1067	43	20	26	89	17	632	47	696	1882
Grand Total	10	20	21	51	104	1596	71	1771	70	35	40	145	30	1062	74	1166	3133
Apprch %	19.6	39.2	41.2		5.9	90.1	4		48.3	24.1	27.6		2.6	91.1	6.3		
Total %	0.3	0.6	0.7	1.6	3.3	50.9	2.3	56.5	2.2	1.1	1.3	4.6	1	33.9	2.4	37.2	

	Del Amo Circle East Southbound				Carson Street Westbound				Del Amo Circle East Northbound				Carson Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	**2**	**5**	**5**	**12**	9	210	8	227	12	4	5	21	6	151	12	169	429
08:15 AM	0	3	1	4	10	**267**	**11**	288	7	**8**	5	20	2	155	6	163	475
08:30 AM	1	4	4	9	13	265	11	**289**	**16**	2	**9**	**27**	1	131	10	142	467
08:45 AM	2	1	2	5	**14**	239	10	263	8	6	7	21	**8**	**195**	**19**	**222**	**511**
Total Volume	5	13	12	30	46	981	40	1067	43	20	26	89	17	632	47	696	1882
% App. Total	16.7	43.3	40		4.3	91.9	3.7		48.3	22.5	29.2		2.4	90.8	6.8		
PHF	.625	.650	.600	.625	.821	.919	.909	.923	.672	.625	.722	.824	.531	.810	.618	.784	.921

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City of Torrance
N/S: Del Amo Circle East
E/W: Carson Street
Weather: Clear

File Name : 16_TOR_Del Amo Cir_Carson AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	**3**	0	2	5	9	210	8	227	12	4	5	21	6	151	12	169
+15 mins.	2	**5**	**5**	**12**	10	**267**	**11**	288	7	**8**	5	20	2	155	6	163
+30 mins.	0	3	1	4	13	265	11	**289**	**16**	2	**9**	**27**	1	131	10	142
+45 mins.	1	4	4	9	**14**	239	10	263	8	6	7	21	**8**	**195**	**19**	**222**
Total Volume	6	12	12	30	46	981	40	1067	43	20	26	89	17	632	47	696
% App. Total	20	40	40		4.3	91.9	3.7		48.3	22.5	29.2		2.4	90.8	6.8	
PHF	.500	.600	.600	.625	.821	.919	.909	.923	.672	.625	.722	.824	.531	.810	.618	.784

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City of Torrance
N/S: Del Amo Circle East
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File Name : 16_TOR_Del Amo Cir_Carson PM
Site Code : 05721690
Start Date : 11/30/2021
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Groups Printed- Total Volume

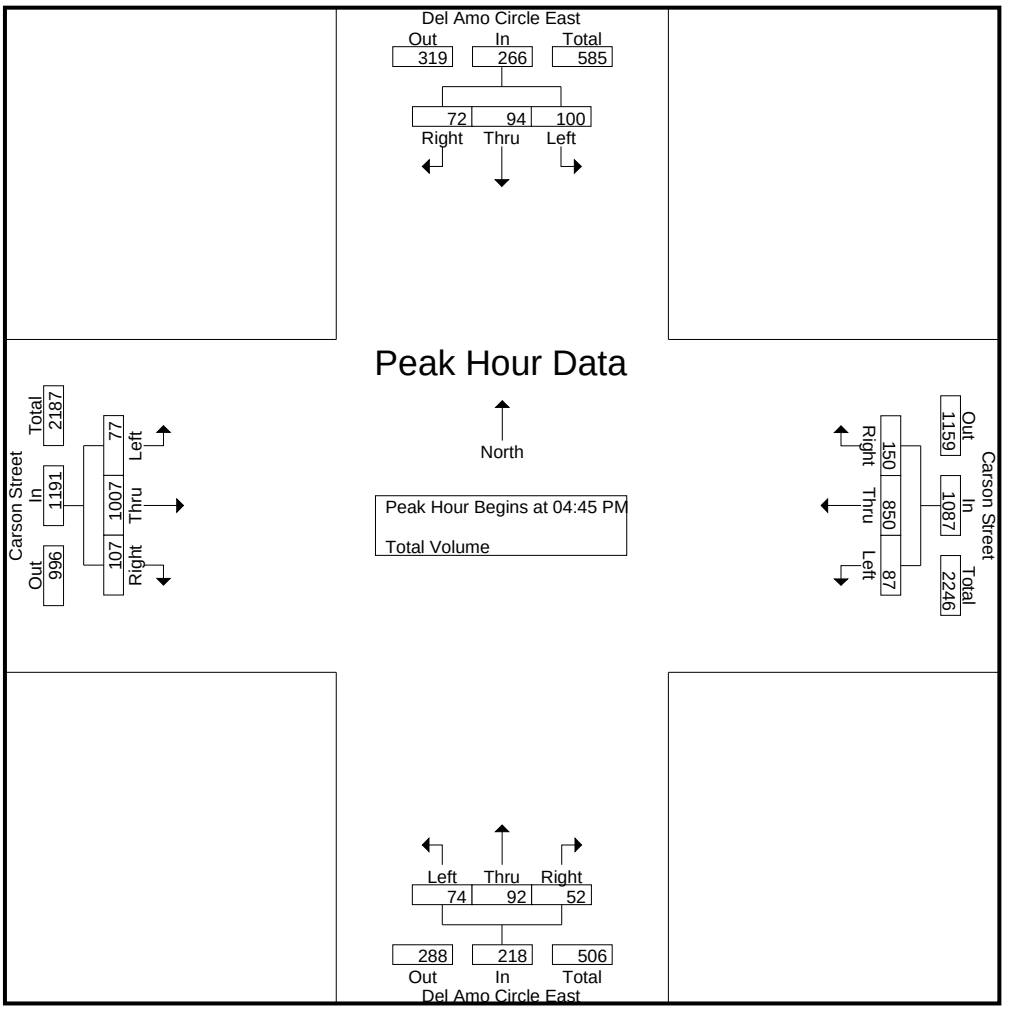
	Del Amo Circle East Southbound				Carson Street Westbound				Del Amo Circle East Northbound				Carson Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	24	28	18	70	19	203	43	265	28	18	22	68	19	265	35	319	722
04:15 PM	21	22	19	62	18	193	35	246	24	18	18	60	9	248	29	286	654
04:30 PM	22	26	14	62	18	208	33	259	25	26	17	68	16	259	28	303	692
04:45 PM	18	25	12	55	21	225	37	283	18	24	13	55	20	231	24	275	668
Total	85	101	63	249	76	829	148	1053	95	86	70	251	64	1003	116	1183	2736
05:00 PM	21	25	14	60	18	223	38	279	18	27	11	56	20	276	24	320	715
05:15 PM	24	24	25	73	26	194	31	251	21	22	15	58	15	247	23	285	667
05:30 PM	37	20	21	78	22	208	44	274	17	19	13	49	22	253	36	311	712
05:45 PM	21	21	20	62	21	190	44	255	16	16	12	44	23	235	13	271	632
Total	103	90	80	273	87	815	157	1059	72	84	51	207	80	1011	96	1187	2726
Grand Total	188	191	143	522	163	1644	305	2112	167	170	121	458	144	2014	212	2370	5462
Apprch %	36	36.6	27.4		7.7	77.8	14.4		36.5	37.1	26.4		6.1	85	8.9		
Total %	3.4	3.5	2.6	9.6	3	30.1	5.6	38.7	3.1	3.1	2.2	8.4	2.6	36.9	3.9	43.4	

	Del Amo Circle East Southbound				Carson Street Westbound				Del Amo Circle East Northbound				Carson Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	18	**25**	12	55	21	**225**	37	**283**	18	24	13	55	20	231	24	275	668
05:00 PM	21	25	14	60	18	223	38	279	18	**27**	11	56	20	**276**	24	**320**	**715**
05:15 PM	24	24	**25**	73	**26**	194	31	251	**21**	22	**15**	**58**	15	247	23	285	667
05:30 PM	**37**	20	21	**78**	22	208	**44**	274	17	19	13	49	**22**	253	**36**	311	712
Total Volume	100	94	72	266	87	850	150	1087	74	92	52	218	77	1007	107	1191	2762
% App. Total	37.6	35.3	27.1		8	78.2	13.8		33.9	42.2	23.9		6.5	84.6	9		
PHF	.676	.940	.720	.853	.837	.944	.852	.960	.881	.852	.867	.940	.875	.912	.743	.930	.966

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City of Torrance
N/S: Del Amo Circle East
E/W: Carson Street
Weather: Clear

File Name : 16_TOR_Del Amo Cir_Carson PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:45 PM				04:00 PM				04:45 PM			
+0 mins.	21	**25**	14	60	21	**225**	37	**283**	**28**	18	**22**	**68**	20	231	24	275
+15 mins.	24	24	**25**	73	18	223	38	279	24	18	18	60	20	**276**	24	**320**
+30 mins.	**37**	20	21	**78**	**26**	194	31	251	25	**26**	17	68	15	247	23	285
+45 mins.	21	21	20	62	22	208	**44**	274	18	24	13	55	**22**	253	**36**	311
Total Volume	103	90	80	273	87	850	150	1087	95	86	70	251	77	1007	107	1191
% App. Total	37.7	33	29.3		8	78.2	13.8		37.8	34.3	27.9		6.5	84.6	9	
PHF	.696	.900	.800	.875	.837	.944	.852	.960	.848	.827	.795	.923	.875	.912	.743	.930

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City of Torrance
N/S: Madrona Avenue
E/W: Carson Street
Weather: Clear

File Name : 17_TOR_Madrona_Carson AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

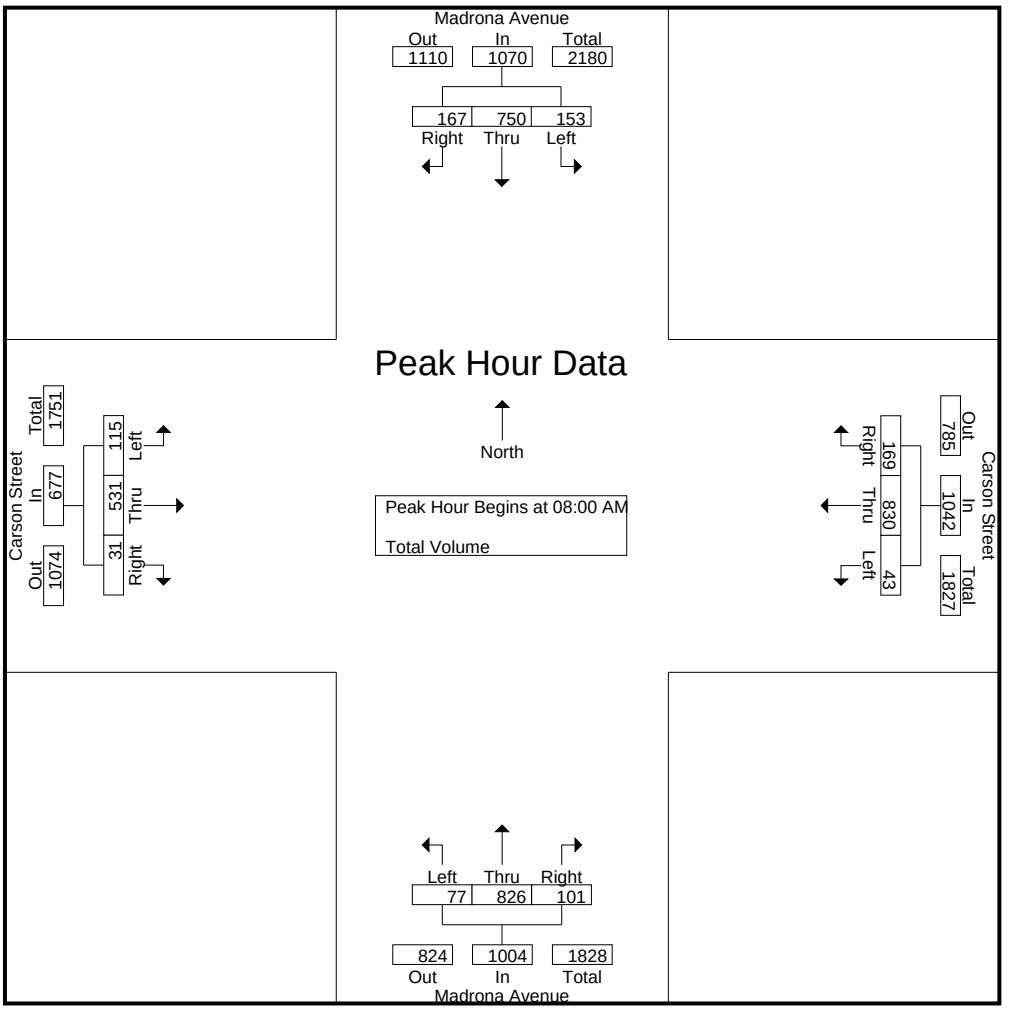
	Madrona Avenue Southbound				Carson Street Westbound				Madrona Avenue Northbound				Carson Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	19	88	21	128	5	110	31	146	3	135	6	144	14	51	6	71	489
07:15 AM	19	90	26	135	4	120	24	148	4	167	11	182	22	75	4	101	566
07:30 AM	31	169	36	236	5	160	48	213	9	208	10	227	24	97	3	124	800
07:45 AM	31	148	38	217	12	181	39	232	14	192	13	219	27	115	10	152	820
Total	100	495	121	716	26	571	142	739	30	702	40	772	87	338	23	448	2675
08:00 AM	35	151	39	225	9	199	37	245	7	195	19	221	31	128	6	165	856
08:15 AM	47	210	34	291	8	215	41	264	29	202	30	261	19	133	9	161	977
08:30 AM	26	172	37	235	16	243	42	301	21	207	29	257	25	108	5	138	931
08:45 AM	45	217	57	319	10	173	49	232	20	222	23	265	40	162	11	213	1029
Total	153	750	167	1070	43	830	169	1042	77	826	101	1004	115	531	31	677	3793
Grand Total	253	1245	288	1786	69	1401	311	1781	107	1528	141	1776	202	869	54	1125	6468
Apprch %	14.2	69.7	16.1		3.9	78.7	17.5		6	86	7.9		18	77.2	4.8		
Total %	3.9	19.2	4.5	27.6	1.1	21.7	4.8	27.5	1.7	23.6	2.2	27.5	3.1	13.4	0.8	17.4	

	Madrona Avenue Southbound				Carson Street Westbound				Madrona Avenue Northbound				Carson Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	35	151	39	225	9	199	37	245	7	195	19	221	31	128	6	165	856
08:15 AM	**47**	210	34	291	8	215	41	264	**29**	202	**30**	261	19	133	9	161	977
08:30 AM	26	172	37	235	**16**	**243**	42	**301**	21	207	29	257	25	108	5	138	931
08:45 AM	45	**217**	**57**	**319**	10	173	**49**	232	20	**222**	23	**265**	**40**	**162**	**11**	**213**	**1029**
Total Volume	153	750	167	1070	43	830	169	1042	77	826	101	1004	115	531	31	677	3793
% App. Total	14.3	70.1	15.6		4.1	79.7	16.2		7.7	82.3	10.1		17	78.4	4.6		
PHF	.814	.864	.732	.839	.672	.854	.862	.865	.664	.930	.842	.947	.719	.819	.705	.795	.922

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City of Torrance
N/S: Madrona Avenue
E/W: Carson Street
Weather: Clear

File Name : 17_TOR_Madrona_Carson AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				07:45 AM				08:00 AM				08:00 AM			
+0 mins.	35	151	39	225	12	181	39	232	7	195	19	221	31	128	6	165
+15 mins.	**47**	210	34	291	9	199	37	245	**29**	202	**30**	261	19	133	9	161
+30 mins.	26	172	37	235	8	215	41	264	21	207	29	257	25	108	5	138
+45 mins.	45	**217**	**57**	**319**	**16**	**243**	**42**	**301**	20	**222**	23	**265**	**40**	**162**	**11**	**213**
Total Volume	153	750	167	1070	45	838	159	1042	77	826	101	1004	115	531	31	677
% App. Total	14.3	70.1	15.6		4.3	80.4	15.3		7.7	82.3	10.1		17	78.4	4.6	
PHF	.814	.864	.732	.839	.703	.862	.946	.865	.664	.930	.842	.947	.719	.819	.705	.795

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City of Torrance
N/S: Madrona Avenue
E/W: Carson Street
Weather: Clear

File Name : 17_TOR_Madrona_Carson PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

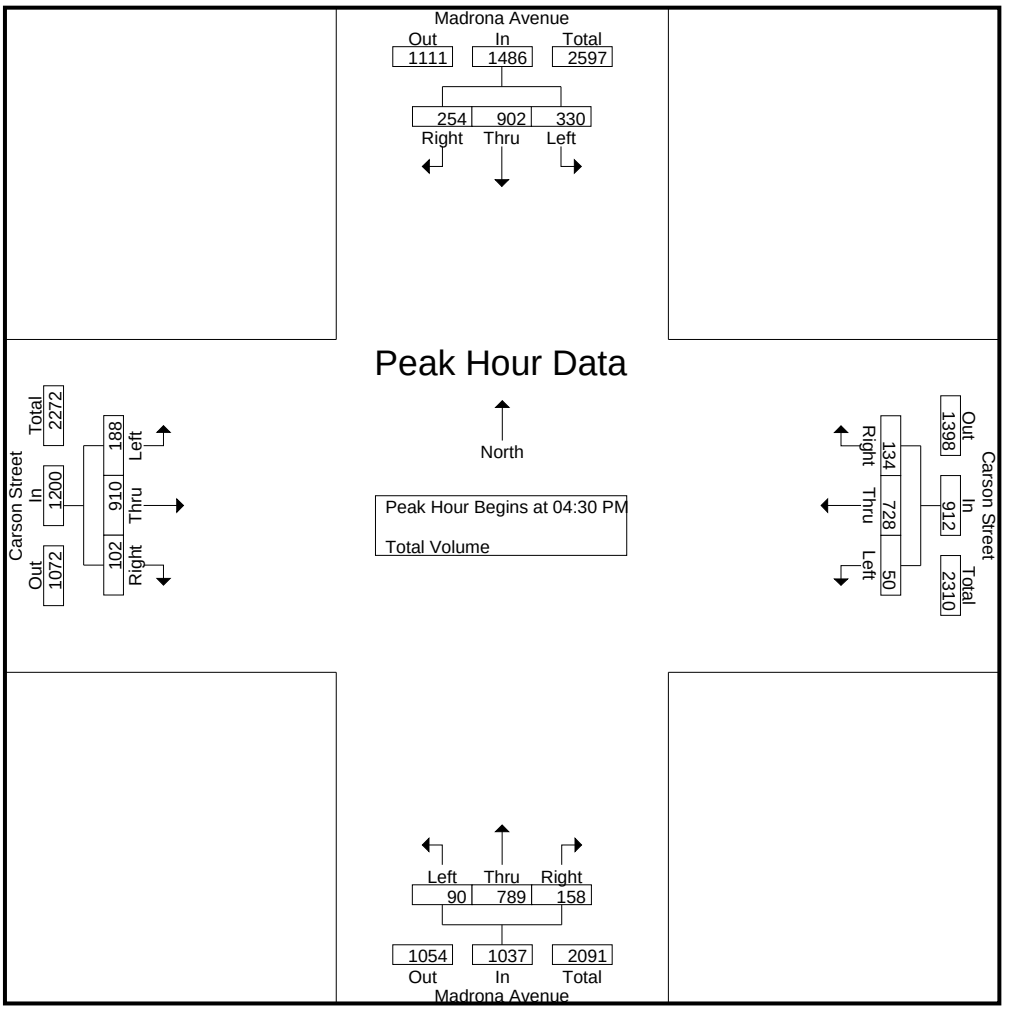
	Madrona Avenue Southbound				Carson Street Westbound				Madrona Avenue Northbound				Carson Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	76	230	53	359	24	178	37	239	25	211	27	263	61	240	29	330	1191
04:15 PM	73	206	57	336	21	175	36	232	16	223	31	270	53	225	23	301	1139
04:30 PM	86	228	60	374	9	176	34	219	29	164	52	245	48	233	19	300	1138
04:45 PM	84	180	72	336	17	194	36	247	22	224	31	277	34	213	23	270	1130
Total	319	844	242	1405	71	723	143	937	92	822	141	1055	196	911	94	1201	4598
05:00 PM	78	254	73	405	14	184	28	226	22	213	38	273	56	229	31	316	1220
05:15 PM	82	240	49	371	10	174	36	220	17	188	37	242	50	235	29	314	1147
05:30 PM	89	186	56	331	19	181	27	227	30	184	45	259	50	234	24	308	1125
05:45 PM	69	202	50	321	14	203	32	249	20	175	23	218	58	214	15	287	1075
Total	318	882	228	1428	57	742	123	922	89	760	143	992	214	912	99	1225	4567
Grand Total	637	1726	470	2833	128	1465	266	1859	181	1582	284	2047	410	1823	193	2426	9165
Apprch %	22.5	60.9	16.6		6.9	78.8	14.3		8.8	77.3	13.9		16.9	75.1	8		
Total %	7	18.8	5.1	30.9	1.4	16	2.9	20.3	2	17.3	3.1	22.3	4.5	19.9	2.1	26.5	

	Madrona Avenue Southbound				Carson Street Westbound				Madrona Avenue Northbound				Carson Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**86**	228	60	374	9	176	34	219	**29**	164	**52**	245	48	233	19	300	1138
04:45 PM	84	180	72	336	**17**	**194**	**36**	**247**	22	**224**	31	**277**	34	213	23	270	1130
05:00 PM	78	**254**	**73**	**405**	14	184	28	226	22	213	38	273	**56**	229	**31**	**316**	**1220**
05:15 PM	82	240	49	371	10	174	36	220	17	188	37	242	50	**235**	29	314	1147
Total Volume	330	902	254	1486	50	728	134	912	90	789	158	1037	188	910	102	1200	4635
% App. Total	22.2	60.7	17.1		5.5	79.8	14.7		8.7	76.1	15.2		15.7	75.8	8.5		
PHF	.959	.888	.870	.917	.735	.938	.931	.923	.776	.881	.760	.936	.839	.968	.823	.949	.950

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City of Torrance
N/S: Madrona Avenue
E/W: Carson Street
Weather: Clear

File Name : 17_TOR_Madrona_Carson PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:00 PM				04:15 PM				05:00 PM			
+0 mins.	**86**	228	60	374	**24**	178	**37**	239	16	223	31	270	56	229	**31**	**316**
+15 mins.	84	180	72	336	21	175	36	232	**29**	164	**52**	245	50	**235**	29	314
+30 mins.	78	**254**	**73**	**405**	9	176	34	219	22	**224**	31	**277**	50	234	24	308
+45 mins.	82	240	49	371	17	**194**	36	**247**	22	213	38	273	**58**	214	15	287
Total Volume	330	902	254	1486	71	723	143	937	89	824	152	1065	214	912	99	1225
% App. Total	22.2	60.7	17.1		7.6	77.2	15.3		8.4	77.4	14.3		17.5	74.4	8.1	
PHF	.959	.888	.870	.917	.740	.932	.966	.948	.767	.920	.731	.961	.922	.970	.798	.969

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City of Torrance
N/S: Maple Avenue
E/W: Carson Street
Weather: Clear

File Name : 18_TOR_Maple_Carson AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

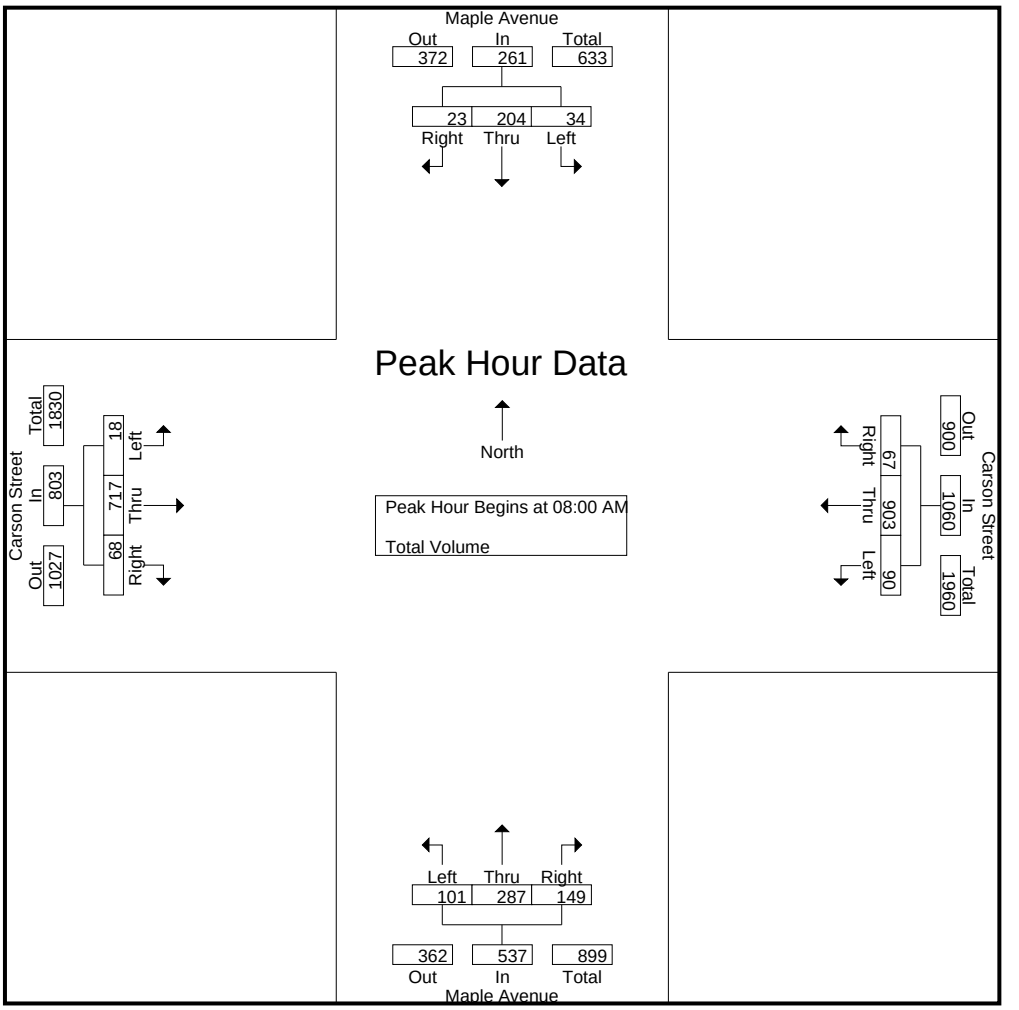
	Maple Avenue Southbound				Carson Street Westbound				Maple Avenue Northbound				Carson Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	6	12	2	20	9	138	7	154	9	31	11	51	3	74	6	83	308
07:15 AM	10	12	3	25	6	143	15	164	3	41	11	55	6	99	3	108	352
07:30 AM	10	22	2	34	9	195	11	215	24	52	25	101	0	145	12	157	507
07:45 AM	13	31	6	50	15	214	19	248	13	46	26	85	4	159	9	172	555
Total	39	77	13	129	39	690	52	781	49	170	73	292	13	477	30	520	1722
08:00 AM	7	26	3	36	25	223	12	260	18	55	39	112	6	158	8	172	580
08:15 AM	6	36	6	48	19	219	9	247	25	52	54	131	6	196	18	220	646
08:30 AM	7	68	8	83	25	242	11	278	29	83	42	154	5	159	14	178	693
08:45 AM	14	74	6	94	21	219	35	275	29	97	14	140	1	204	28	233	742
Total	34	204	23	261	90	903	67	1060	101	287	149	537	18	717	68	803	2661
Grand Total	73	281	36	390	129	1593	119	1841	150	457	222	829	31	1194	98	1323	4383
Apprch %	18.7	72.1	9.2		7	86.5	6.5		18.1	55.1	26.8		2.3	90.2	7.4		
Total %	1.7	6.4	0.8	8.9	2.9	36.3	2.7	42	3.4	10.4	5.1	18.9	0.7	27.2	2.2	30.2	

	Maple Avenue Southbound				Carson Street Westbound				Maple Avenue Northbound				Carson Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	7	26	3	36	**25**	223	12	260	18	55	39	112	**6**	158	8	172	580
08:15 AM	6	36	6	48	19	219	9	247	25	52	**54**	131	6	196	18	220	646
08:30 AM	7	68	**8**	83	25	**242**	11	**278**	**29**	83	42	**154**	5	159	14	178	693
08:45 AM	**14**	**74**	6	**94**	21	219	**35**	275	29	**97**	14	140	1	**204**	**28**	**233**	**742**
Total Volume	34	204	23	261	90	903	67	1060	101	287	149	537	18	717	68	803	2661
% App. Total	13	78.2	8.8		8.5	85.2	6.3		18.8	53.4	27.7		2.2	89.3	8.5		
PHF	.607	.689	.719	.694	.900	.933	.479	.953	.871	.740	.690	.872	.750	.879	.607	.862	.897

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City of Torrance
N/S: Maple Avenue
E/W: Carson Street
Weather: Clear

File Name : 18_TOR_Maple_Carson AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	7	26	3	36	**25**	223	12	260	18	55	39	112	**6**	158	8	172
+15 mins.	6	36	6	48	19	219	9	247	25	52	**54**	131	6	196	18	220
+30 mins.	7	68	**8**	83	25	**242**	11	**278**	**29**	83	42	**154**	5	159	14	178
+45 mins.	**14**	**74**	6	**94**	21	219	**35**	275	29	**97**	14	140	1	**204**	**28**	**233**
Total Volume	34	204	23	261	90	903	67	1060	101	287	149	537	18	717	68	803
% App. Total	13	78.2	8.8		8.5	85.2	6.3		18.8	53.4	27.7		2.2	89.3	8.5	
PHF	.607	.689	.719	.694	.900	.933	.479	.953	.871	.740	.690	.872	.750	.879	.607	.862

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City of Torrance
N/S: Maple Avenue
E/W: Carson Street
Weather: Clear

File Name : 18_TOR_Maple_Carson PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

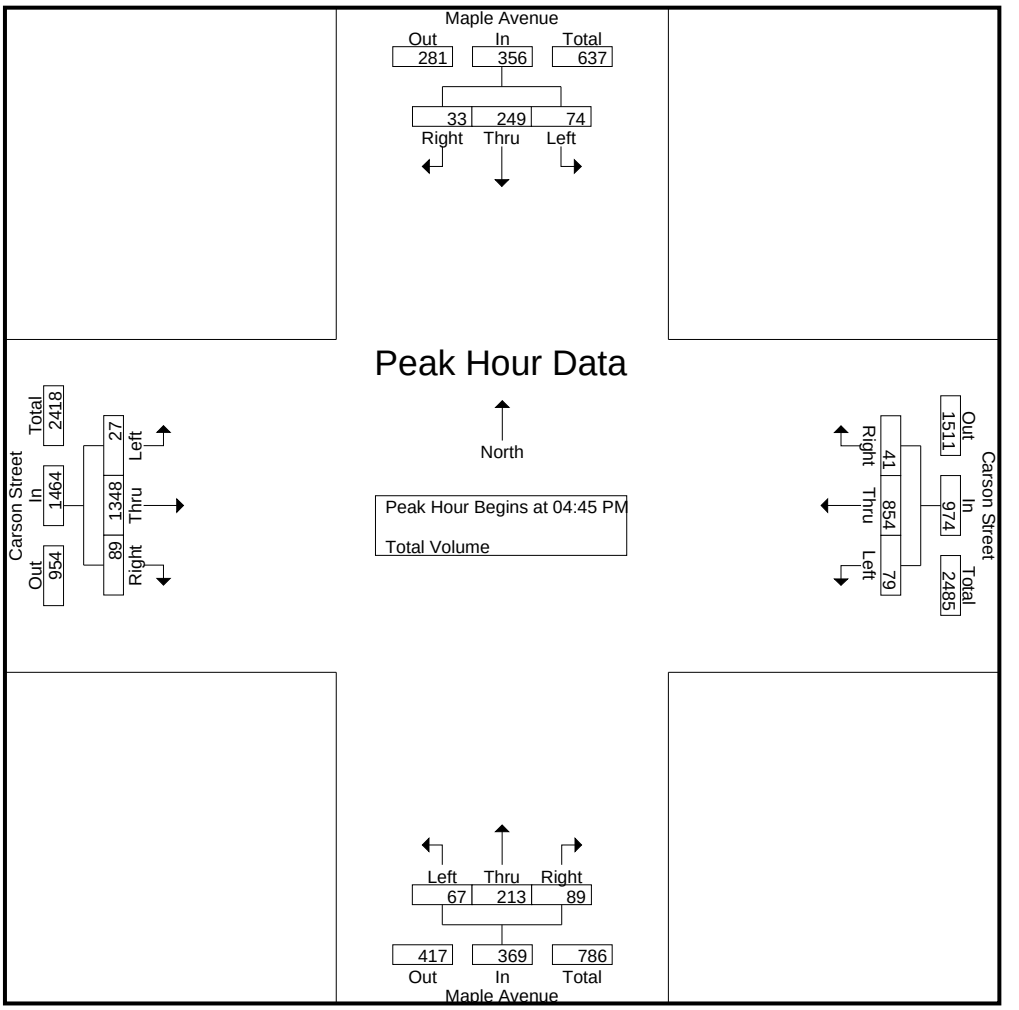
	Maple Avenue Southbound				Carson Street Westbound				Maple Avenue Northbound				Carson Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	20	62	5	87	16	226	10	252	12	56	19	87	3	310	25	338	764
04:15 PM	16	52	4	72	19	197	7	223	23	40	20	83	5	293	26	324	702
04:30 PM	11	62	5	78	21	206	10	237	22	53	22	97	5	341	20	366	778
04:45 PM	8	52	10	70	21	226	13	260	22	70	21	113	7	305	29	341	784
Total	55	228	24	307	77	855	40	972	79	219	82	380	20	1249	100	1369	3028
05:00 PM	20	80	9	109	19	190	7	216	16	54	22	92	9	316	30	355	772
05:15 PM	17	48	10	75	19	233	11	263	11	48	22	81	5	373	20	398	817
05:30 PM	29	69	4	102	20	205	10	235	18	41	24	83	6	354	10	370	790
05:45 PM	10	51	6	67	16	225	12	253	12	27	10	49	4	273	22	299	668
Total	76	248	29	353	74	853	40	967	57	170	78	305	24	1316	82	1422	3047
Grand Total	131	476	53	660	151	1708	80	1939	136	389	160	685	44	2565	182	2791	6075
Apprch %	19.8	72.1	8		7.8	88.1	4.1		19.9	56.8	23.4		1.6	91.9	6.5		
Total %	2.2	7.8	0.9	10.9	2.5	28.1	1.3	31.9	2.2	6.4	2.6	11.3	0.7	42.2	3	45.9	

	Maple Avenue Southbound				Carson Street Westbound				Maple Avenue Northbound				Carson Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	8	52	**10**	70	**21**	226	**13**	260	**22**	**70**	21	**113**	7	305	29	341	784
05:00 PM	20	**80**	9	**109**	19	190	7	216	16	54	22	92	**9**	316	**30**	355	772
05:15 PM	17	48	10	75	19	**233**	11	**263**	11	48	22	81	5	**373**	20	**398**	**817**
05:30 PM	**29**	69	4	102	20	205	10	235	18	41	**24**	83	6	354	10	370	790
Total Volume	74	249	33	356	79	854	41	974	67	213	89	369	27	1348	89	1464	3163
% App. Total	20.8	69.9	9.3		8.1	87.7	4.2		18.2	57.7	24.1		1.8	92.1	6.1		
PHF	.638	.778	.825	.817	.940	.916	.788	.926	.761	.761	.927	.816	.750	.903	.742	.920	.968

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City of Torrance
N/S: Maple Avenue
E/W: Carson Street
Weather: Clear

File Name : 18_TOR_Maple_Carson PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:30 PM				04:15 PM				04:45 PM			
+0 mins.	8	52	**10**	70	**21**	206	10	237	**23**	40	20	83	7	305	29	341
+15 mins.	20	**80**	9	**109**	21	226	**13**	260	22	53	**22**	97	**9**	316	**30**	355
+30 mins.	17	48	10	75	19	190	7	216	22	**70**	21	**113**	5	**373**	20	**398**
+45 mins.	**29**	69	4	102	19	**233**	11	**263**	16	54	22	92	6	354	10	370
Total Volume	74	249	33	356	80	855	41	976	83	217	85	385	27	1348	89	1464
% App. Total	20.8	69.9	9.3		8.2	87.6	4.2		21.6	56.4	22.1		1.8	92.1	6.1	
PHF	.638	.778	.825	.817	.952	.917	.788	.928	.902	.775	.966	.852	.750	.903	.742	.920

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City of Torrance
N/S: Crenshaw Boulevard
E/W: Carson Street
Weather: Clear

File Name : 19_TOR_Crenshaw_Carson AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

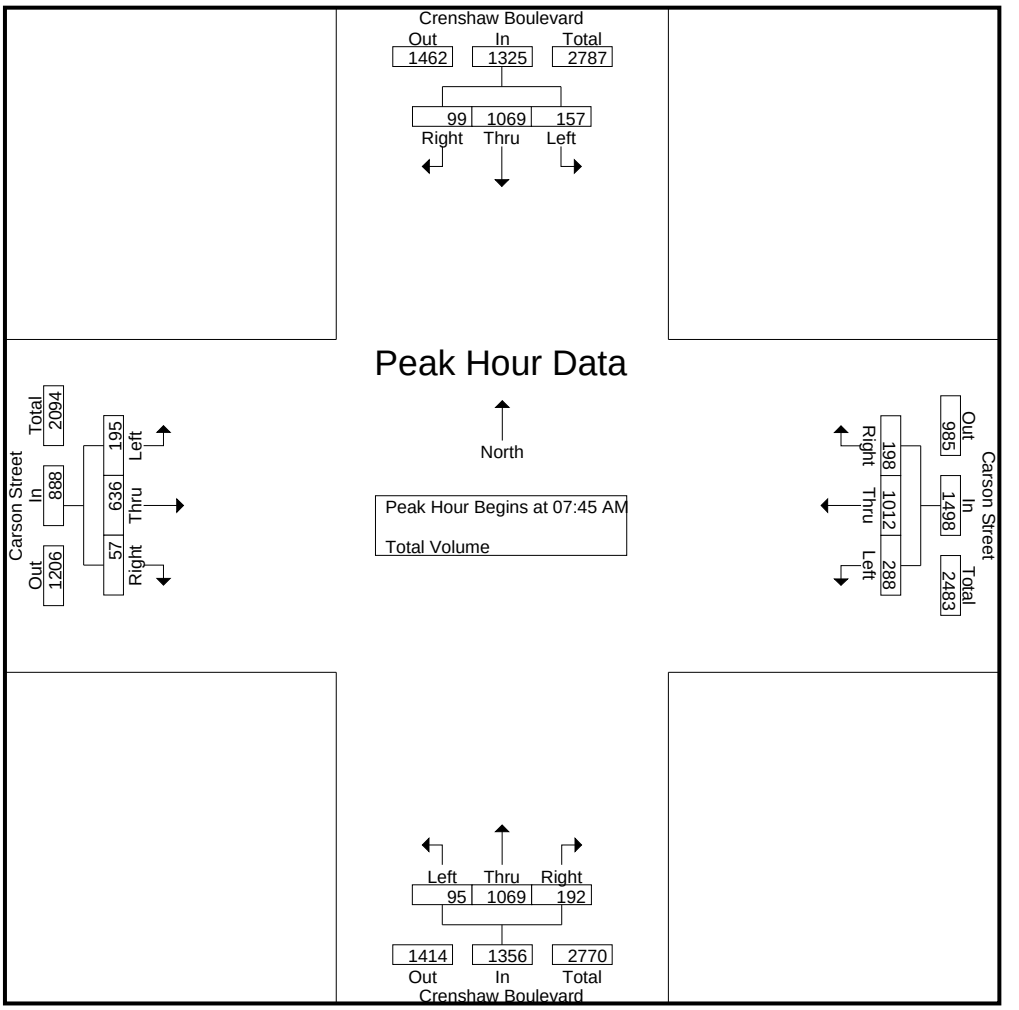
	Crenshaw Boulevard Southbound				Carson Street Westbound				Crenshaw Boulevard Northbound				Carson Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	16	172	12	200	36	130	34	200	3	170	27	200	27	69	4	100	700
07:15 AM	26	202	14	242	31	146	39	216	10	245	32	287	24	110	5	139	884
07:30 AM	66	240	13	319	73	200	44	317	17	237	90	344	25	145	11	181	1161
07:45 AM	58	273	15	346	95	260	53	408	21	255	73	349	43	170	4	217	1320
Total	166	887	54	1107	235	736	170	1141	51	907	222	1180	119	494	24	637	4065
08:00 AM	26	257	20	303	54	226	49	329	19	283	38	340	47	131	13	191	1163
08:15 AM	35	250	40	325	72	272	42	386	23	222	41	286	60	171	19	250	1247
08:30 AM	38	289	24	351	67	254	54	375	32	309	40	381	45	164	21	230	1337
08:45 AM	57	313	29	399	54	205	34	293	31	284	53	368	44	149	17	210	1270
Total	156	1109	113	1378	247	957	179	1383	105	1098	172	1375	196	615	70	881	5017
Grand Total	322	1996	167	2485	482	1693	349	2524	156	2005	394	2555	315	1109	94	1518	9082
Apprch %	13	80.3	6.7		19.1	67.1	13.8		6.1	78.5	15.4		20.8	73.1	6.2		
Total %	3.5	22	1.8	27.4	5.3	18.6	3.8	27.8	1.7	22.1	4.3	28.1	3.5	12.2	1	16.7	

	Crenshaw Boulevard Southbound				Carson Street Westbound				Crenshaw Boulevard Northbound				Carson Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**58**	273	15	346	**95**	260	53	**408**	21	255	**73**	349	43	170	4	217	1320
08:00 AM	26	257	20	303	54	226	49	329	19	283	38	340	47	131	13	191	1163
08:15 AM	35	250	**40**	325	72	**272**	42	386	23	222	41	286	**60**	**171**	19	**250**	1247
08:30 AM	38	**289**	24	**351**	67	254	**54**	375	**32**	**309**	40	**381**	45	164	**21**	230	**1337**
Total Volume	157	1069	99	1325	288	1012	198	1498	95	1069	192	1356	195	636	57	888	5067
% App. Total	11.8	80.7	7.5		19.2	67.6	13.2		7	78.8	14.2		22	71.6	6.4		
PHF	.677	.925	.619	.944	.758	.930	.917	.918	.742	.865	.658	.890	.813	.930	.679	.888	.947

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City of Torrance
N/S: Crenshaw Boulevard
E/W: Carson Street
Weather: Clear

File Name : 19_TOR_Crenshaw_Carson AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				07:45 AM				08:00 AM				07:45 AM			
+0 mins.	26	257	20	303	**95**	260	53	**408**	19	283	38	340	43	170	4	217
+15 mins.	35	250	**40**	325	54	226	49	329	23	222	41	286	47	131	13	191
+30 mins.	38	289	24	351	72	**272**	42	386	**32**	**309**	40	**381**	**60**	**171**	19	**250**
+45 mins.	**57**	**313**	29	**399**	67	254	**54**	375	31	284	**53**	368	45	164	**21**	230
Total Volume	156	1109	113	1378	288	1012	198	1498	105	1098	172	1375	195	636	57	888
% App. Total	11.3	80.5	8.2		19.2	67.6	13.2		7.6	79.9	12.5		22	71.6	6.4	
PHF	.684	.886	.706	.863	.758	.930	.917	.918	.820	.888	.811	.902	.813	.930	.679	.888

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City of Torrance
N/S: Crenshaw Boulevard
E/W: Carson Street
Weather: Clear

File Name : 19_TOR_Crenshaw_Carson PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

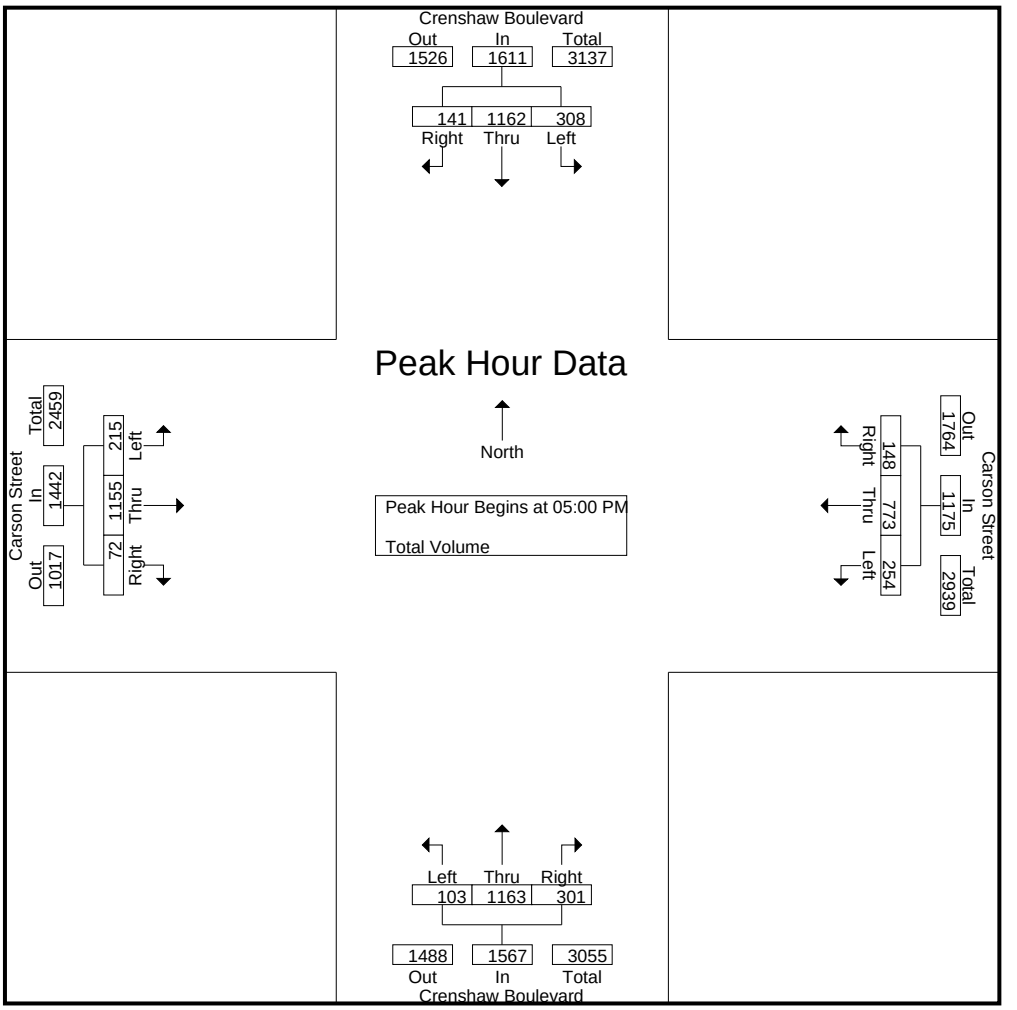
	Crenshaw Boulevard Southbound				Carson Street Westbound				Crenshaw Boulevard Northbound				Carson Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	71	296	20	387	51	188	47	286	36	307	46	389	32	280	18	330	1392
04:15 PM	53	212	26	291	65	207	43	315	23	289	48	360	43	283	24	350	1316
04:30 PM	61	312	34	407	66	162	37	265	17	310	71	398	64	274	17	355	1425
04:45 PM	81	275	26	382	64	239	49	352	21	210	45	276	33	305	26	364	1374
Total	266	1095	106	1467	246	796	176	1218	97	1116	210	1423	172	1142	85	1399	5507
05:00 PM	69	282	32	383	54	189	43	286	21	325	76	422	50	296	16	362	1453
05:15 PM	84	300	31	415	73	186	37	296	22	300	85	407	55	280	14	349	1467
05:30 PM	89	260	37	386	69	219	34	322	46	261	65	372	61	335	17	413	1493
05:45 PM	66	320	41	427	58	179	34	271	14	277	75	366	49	244	25	318	1382
Total	308	1162	141	1611	254	773	148	1175	103	1163	301	1567	215	1155	72	1442	5795
Grand Total	574	2257	247	3078	500	1569	324	2393	200	2279	511	2990	387	2297	157	2841	11302
Apprch %	18.6	73.3	8		20.9	65.6	13.5		6.7	76.2	17.1		13.6	80.9	5.5		
Total %	5.1	20	2.2	27.2	4.4	13.9	2.9	21.2	1.8	20.2	4.5	26.5	3.4	20.3	1.4	25.1	

	Crenshaw Boulevard Southbound				Carson Street Westbound				Crenshaw Boulevard Northbound				Carson Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	69	282	32	383	54	189	**43**	286	21	**325**	76	**422**	50	296	16	362	1453
05:15 PM	84	300	31	415	**73**	186	37	296	22	300	**85**	407	55	280	14	349	1467
05:30 PM	**89**	260	37	386	69	**219**	34	**322**	**46**	261	65	372	**61**	**335**	17	**413**	**1493**
05:45 PM	66	**320**	**41**	**427**	58	179	34	271	14	277	75	366	49	244	**25**	318	1382
Total Volume	308	1162	141	1611	254	773	148	1175	103	1163	301	1567	215	1155	72	1442	5795
% App. Total	19.1	72.1	8.8		21.6	65.8	12.6		6.6	74.2	19.2		14.9	80.1	5		
PHF	.865	.908	.860	.943	.870	.882	.860	.912	.560	.895	.885	.928	.881	.862	.720	.873	.970

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City of Torrance
N/S: Crenshaw Boulevard
E/W: Carson Street
Weather: Clear

File Name : 19_TOR_Crenshaw_Carson PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:45 PM				05:00 PM				04:45 PM			
+0 mins.	69	282	32	383	64	**239**	**49**	**352**	21	**325**	76	**422**	33	305	**26**	364
+15 mins.	84	300	31	415	54	189	43	286	22	300	**85**	407	50	296	16	362
+30 mins.	**89**	260	37	386	**73**	186	37	296	**46**	261	65	372	55	280	14	349
+45 mins.	66	**320**	**41**	**427**	69	219	34	322	14	277	75	366	**61**	**335**	17	**413**
Total Volume	308	1162	141	1611	260	833	163	1256	103	1163	301	1567	199	1216	73	1488
% App. Total	19.1	72.1	8.8		20.7	66.3	13		6.6	74.2	19.2		13.4	81.7	4.9	
PHF	.865	.908	.860	.943	.890	.871	.832	.892	.560	.895	.885	.928	.816	.907	.702	.901

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City of Torrance
N/S: Anza Avenue
E/W: Sepulveda Boulevard
Weather: Clear

File Name : 20_TOR_Anza_Sepulveda AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

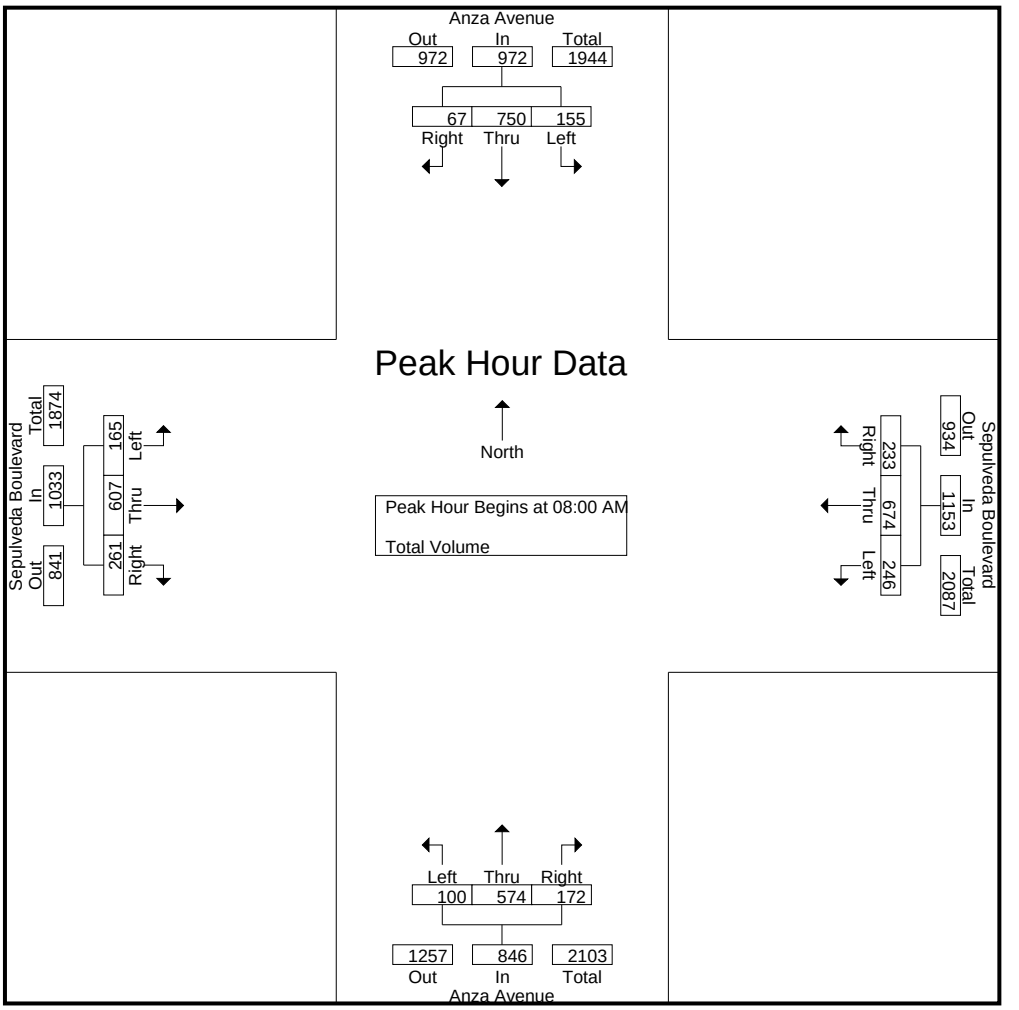
	Anza Avenue Southbound				Sepulveda Boulevard Westbound				Anza Avenue Northbound				Sepulveda Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	12	72	12	96	18	109	29	156	18	80	20	118	24	93	30	147	517
07:15 AM	18	74	13	105	32	151	26	209	30	106	24	160	33	79	48	160	634
07:30 AM	27	144	9	180	51	179	50	280	23	157	36	216	39	100	38	177	853
07:45 AM	38	157	23	218	38	176	40	254	32	134	20	186	40	151	66	257	915
Total	95	447	57	599	139	615	145	899	103	477	100	680	136	423	182	741	2919
08:00 AM	37	153	17	207	52	149	43	244	27	138	39	204	46	151	71	268	923
08:15 AM	47	151	16	214	47	157	55	259	27	120	33	180	43	156	57	256	909
08:30 AM	26	232	13	271	66	162	77	305	23	157	54	234	35	134	51	220	1030
08:45 AM	45	214	21	280	81	206	58	345	23	159	46	228	41	166	82	289	1142
Total	155	750	67	972	246	674	233	1153	100	574	172	846	165	607	261	1033	4004
Grand Total	250	1197	124	1571	385	1289	378	2052	203	1051	272	1526	301	1030	443	1774	6923
Apprch %	15.9	76.2	7.9		18.8	62.8	18.4		13.3	68.9	17.8		17	58.1	25		
Total %	3.6	17.3	1.8	22.7	5.6	18.6	5.5	29.6	2.9	15.2	3.9	22	4.3	14.9	6.4	25.6	

	Anza Avenue Southbound				Sepulveda Boulevard Westbound				Anza Avenue Northbound				Sepulveda Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	37	153	17	207	52	149	43	244	**27**	138	39	204	**46**	151	71	268	923
08:15 AM	**47**	151	16	214	47	157	55	259	27	120	33	180	43	156	57	256	909
08:30 AM	26	**232**	13	271	66	162	**77**	305	23	157	**54**	**234**	35	134	51	220	1030
08:45 AM	45	214	**21**	**280**	**81**	**206**	58	**345**	23	**159**	46	228	41	**166**	**82**	**289**	**1142**
Total Volume	155	750	67	972	246	674	233	1153	100	574	172	846	165	607	261	1033	4004
% App. Total	15.9	77.2	6.9		21.3	58.5	20.2		11.8	67.8	20.3		16	58.8	25.3		
PHF	.824	.808	.798	.868	.759	.818	.756	.836	.926	.903	.796	.904	.897	.914	.796	.894	.877

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City of Torrance
N/S: Anza Avenue
E/W: Sepulveda Boulevard
Weather: Clear

File Name : 20_TOR_Anza_Sepulveda AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	37	153	17	207	52	149	43	244	**27**	138	39	204	**46**	151	71	268
+15 mins.	**47**	151	16	214	47	157	55	259	27	120	33	180	43	156	57	256
+30 mins.	26	**232**	13	271	66	162	**77**	305	23	157	**54**	**234**	35	134	51	220
+45 mins.	45	214	**21**	**280**	**81**	**206**	58	**345**	23	**159**	46	228	41	**166**	**82**	**289**
Total Volume	155	750	67	972	246	674	233	1153	100	574	172	846	165	607	261	1033
% App. Total	15.9	77.2	6.9		21.3	58.5	20.2		11.8	67.8	20.3		16	58.8	25.3	
PHF	.824	.808	.798	.868	.759	.818	.756	.836	.926	.903	.796	.904	.897	.914	.796	.894

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City of Torrance
N/S: Anza Avenue
E/W: Sepulveda Boulevard
Weather: Clear

File Name : 20_TOR_Anza_Sepulveda PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

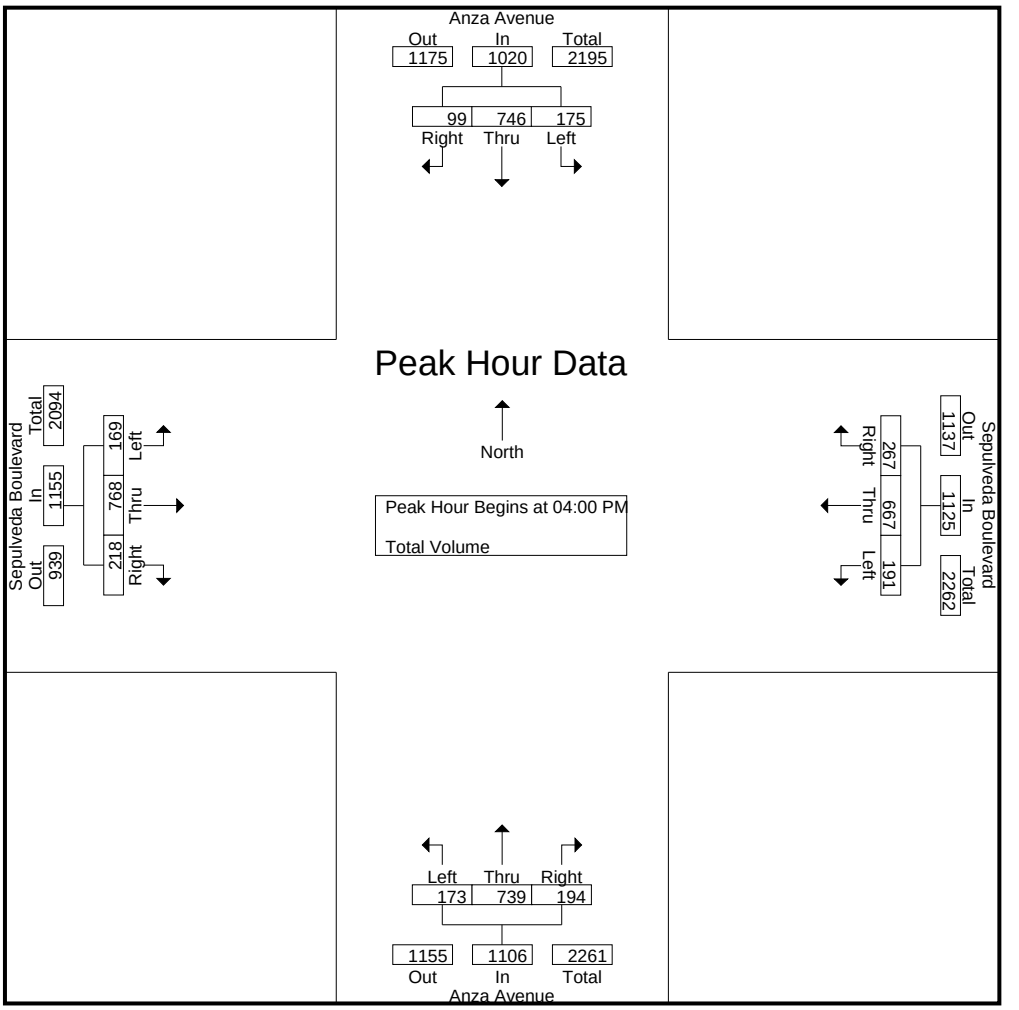
	Anza Avenue Southbound				Sepulveda Boulevard Westbound				Anza Avenue Northbound				Sepulveda Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	39	185	24	248	62	153	59	274	49	179	64	292	44	175	51	270	1084
04:15 PM	52	197	22	271	55	201	62	318	42	159	48	249	39	227	60	326	1164
04:30 PM	41	187	23	251	30	151	63	244	34	218	42	294	46	179	55	280	1069
04:45 PM	43	177	30	250	44	162	83	289	48	183	40	271	40	187	52	279	1089
Total	175	746	99	1020	191	667	267	1125	173	739	194	1106	169	768	218	1155	4406
05:00 PM	36	195	16	247	40	185	57	282	41	193	39	273	42	171	39	252	1054
05:15 PM	48	171	20	239	51	191	84	326	48	169	29	246	35	196	61	292	1103
05:30 PM	40	214	22	276	47	140	64	251	41	195	49	285	33	171	58	262	1074
05:45 PM	38	191	27	256	49	166	65	280	42	148	34	224	29	161	40	230	990
Total	162	771	85	1018	187	682	270	1139	172	705	151	1028	139	699	198	1036	4221
Grand Total	337	1517	184	2038	378	1349	537	2264	345	1444	345	2134	308	1467	416	2191	8627
Apprch %	16.5	74.4	9		16.7	59.6	23.7		16.2	67.7	16.2		14.1	67	19		
Total %	3.9	17.6	2.1	23.6	4.4	15.6	6.2	26.2	4	16.7	4	24.7	3.6	17	4.8	25.4	

	Anza Avenue Southbound				Sepulveda Boulevard Westbound				Anza Avenue Northbound				Sepulveda Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	39	185	24	248	**62**	153	59	274	**49**	179	**64**	292	44	175	51	270	1084
04:15 PM	**52**	**197**	22	**271**	55	**201**	62	**318**	42	159	48	249	39	**227**	**60**	**326**	**1164**
04:30 PM	41	187	23	251	30	151	63	244	34	**218**	42	**294**	**46**	179	55	280	1069
04:45 PM	43	177	**30**	250	44	162	**83**	289	48	183	40	271	40	187	52	279	1089
Total Volume	175	746	99	1020	191	667	267	1125	173	739	194	1106	169	768	218	1155	4406
% App. Total	17.2	73.1	9.7		17	59.3	23.7		15.6	66.8	17.5		14.6	66.5	18.9		
PHF	.841	.947	.825	.941	.770	.830	.804	.884	.883	.847	.758	.940	.918	.846	.908	.886	.946

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City of Torrance
N/S: Anza Avenue
E/W: Sepulveda Boulevard
Weather: Clear

File Name : 20_TOR_Anza_Sepulveda PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:45 PM				04:00 PM				04:00 PM			
+0 mins.	39	185	24	248	44	162	83	289	**49**	179	**64**	292	44	175	51	270
+15 mins.	**52**	**197**	22	**271**	40	185	57	282	42	159	48	249	39	**227**	**60**	**326**
+30 mins.	41	187	23	251	**51**	**191**	**84**	**326**	34	**218**	42	**294**	**46**	179	55	280
+45 mins.	43	177	**30**	250	47	140	64	251	48	183	40	271	40	187	52	279
Total Volume	175	746	99	1020	182	678	288	1148	173	739	194	1106	169	768	218	1155
% App. Total	17.2	73.1	9.7		15.9	59.1	25.1		15.6	66.8	17.5		14.6	66.5	18.9	
PHF	.841	.947	.825	.941	.892	.887	.857	.880	.883	.847	.758	.940	.918	.846	.908	.886

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City of Torrance
N/S: Hawthorne Boulevard
E/W: Sepulveda Boulevard
Weather: Clear

File Name : 21_TOR_Hawthorne_Sepulveda AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

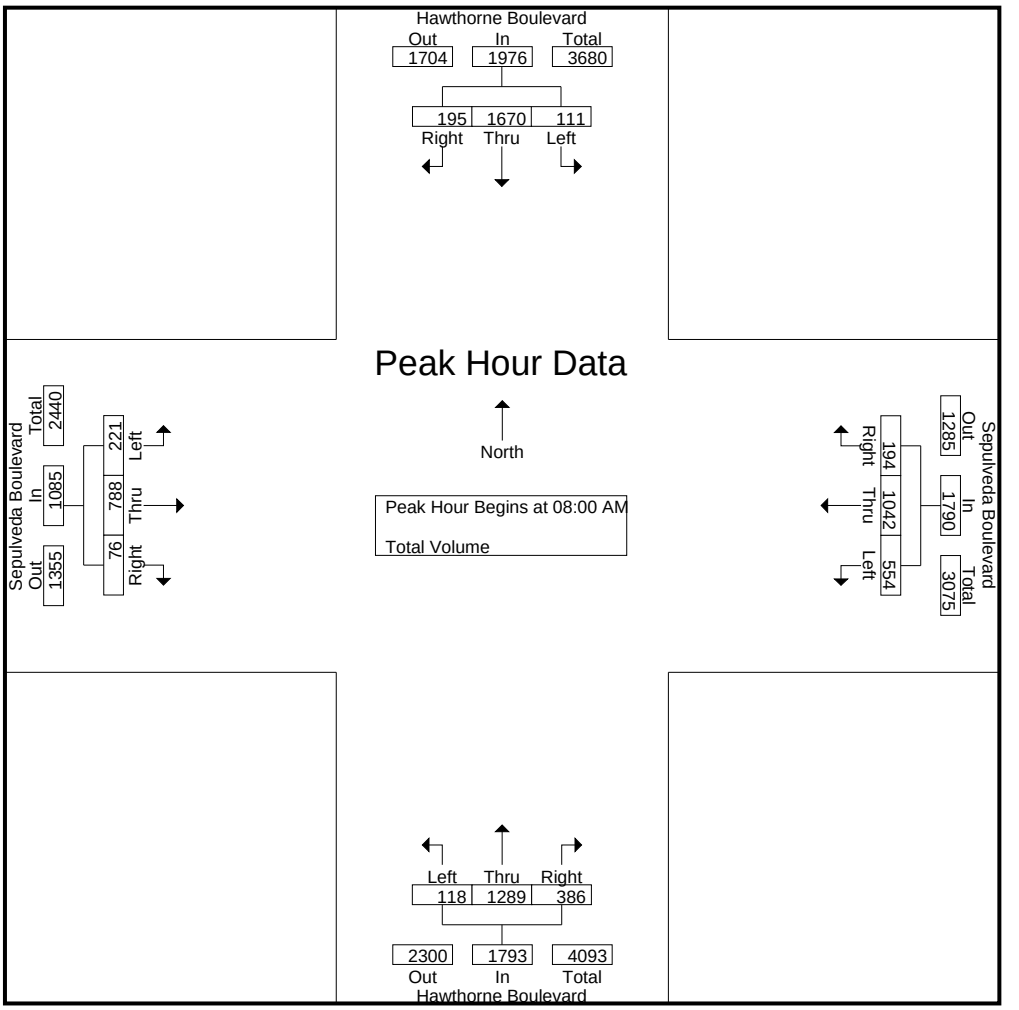
	Hawthorne Boulevard Southbound				Sepulveda Boulevard Westbound				Hawthorne Boulevard Northbound				Sepulveda Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	19	235	19	273	57	118	39	214	12	210	44	266	22	119	14	155	908
07:15 AM	11	266	32	309	97	176	41	314	17	264	67	348	28	101	10	139	1110
07:30 AM	32	321	38	391	82	225	43	350	21	281	82	384	35	142	10	187	1312
07:45 AM	19	431	43	493	139	195	54	388	35	318	85	438	41	150	21	212	1531
Total	81	1253	132	1466	375	714	177	1266	85	1073	278	1436	126	512	55	693	4861
08:00 AM	20	426	63	509	105	210	48	363	24	303	74	401	45	194	16	255	1528
08:15 AM	27	370	39	436	140	274	45	459	28	319	95	442	45	188	22	255	1592
08:30 AM	40	477	48	565	151	283	49	483	30	277	86	393	68	209	18	295	1736
08:45 AM	24	397	45	466	158	275	52	485	36	390	131	557	63	197	20	280	1788
Total	111	1670	195	1976	554	1042	194	1790	118	1289	386	1793	221	788	76	1085	6644
Grand Total	192	2923	327	3442	929	1756	371	3056	203	2362	664	3229	347	1300	131	1778	11505
Apprch %	5.6	84.9	9.5		30.4	57.5	12.1		6.3	73.1	20.6		19.5	73.1	7.4		
Total %	1.7	25.4	2.8	29.9	8.1	15.3	3.2	26.6	1.8	20.5	5.8	28.1	3	11.3	1.1	15.5	

	Hawthorne Boulevard Southbound				Sepulveda Boulevard Westbound				Hawthorne Boulevard Northbound				Sepulveda Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	20	426	**63**	509	105	210	48	363	24	303	74	401	45	194	16	255	1528
08:15 AM	27	370	39	436	140	274	45	459	28	319	95	442	45	188	**22**	255	1592
08:30 AM	**40**	**477**	48	**565**	151	**283**	49	483	30	277	86	393	**68**	**209**	18	**295**	1736
08:45 AM	24	397	45	466	**158**	275	**52**	**485**	**36**	**390**	**131**	**557**	63	197	20	280	**1788**
Total Volume	111	1670	195	1976	554	1042	194	1790	118	1289	386	1793	221	788	76	1085	6644
% App. Total	5.6	84.5	9.9		30.9	58.2	10.8		6.6	71.9	21.5		20.4	72.6	7		
PHF	.694	.875	.774	.874	.877	.920	.933	.923	.819	.826	.737	.805	.813	.943	.864	.919	.929

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City of Torrance
N/S: Hawthorne Boulevard
E/W: Sepulveda Boulevard
Weather: Clear

File Name : 21_TOR_Hawthorne_Sepulveda AM
Site Code : 05721690
Start Date : 11/30/2021



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	19	431	43	493	105	210	48	363	24	303	74	401	45	194	16	255
+15 mins.	20	426	**63**	509	140	274	45	459	28	319	95	442	45	188	**22**	255
+30 mins.	27	370	39	436	151	**283**	49	483	30	277	86	393	**68**	**209**	18	**295**
+45 mins.	**40**	**477**	48	**565**	**158**	275	**52**	**485**	**36**	**390**	**131**	**557**	63	197	20	280
Total Volume	106	1704	193	2003	554	1042	194	1790	118	1289	386	1793	221	788	76	1085
% App. Total	5.3	85.1	9.6		30.9	58.2	10.8		6.6	71.9	21.5		20.4	72.6	7	
PHF	.663	.893	.766	.886	.877	.920	.933	.923	.819	.826	.737	.805	.813	.943	.864	.919

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City of Torrance
N/S: Hawthorne Boulevard
E/W: Sepulveda Boulevard
Weather: Clear

File Name : 21_TOR_Hawthorne_Sepulveda PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

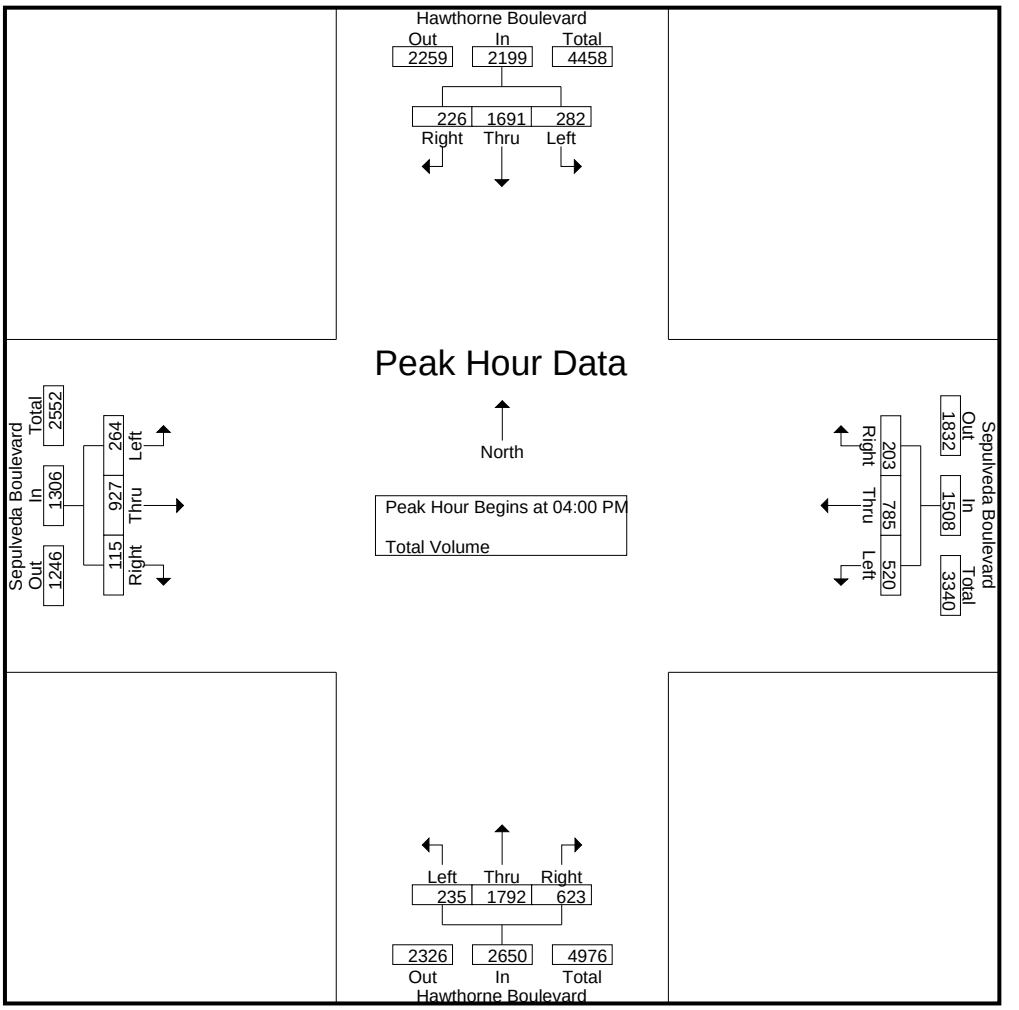
	Hawthorne Boulevard Southbound				Sepulveda Boulevard Westbound				Hawthorne Boulevard Northbound				Sepulveda Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	89	466	64	619	124	204	50	378	52	461	164	677	54	232	31	317	1991
04:15 PM	74	453	52	579	129	200	49	378	58	460	165	683	76	233	33	342	1982
04:30 PM	51	370	49	470	132	169	63	364	54	478	148	680	70	219	27	316	1830
04:45 PM	68	402	61	531	135	212	41	388	71	393	146	610	64	243	24	331	1860
Total	282	1691	226	2199	520	785	203	1508	235	1792	623	2650	264	927	115	1306	7663
05:00 PM	90	421	67	578	121	204	49	374	59	421	145	625	55	216	26	297	1874
05:15 PM	82	447	69	598	138	226	53	417	63	469	135	667	70	210	25	305	1987
05:30 PM	82	354	68	504	117	169	55	341	66	453	153	672	71	216	16	303	1820
05:45 PM	86	362	63	511	154	182	49	385	55	412	153	620	55	178	25	258	1774
Total	340	1584	267	2191	530	781	206	1517	243	1755	586	2584	251	820	92	1163	7455
Grand Total	622	3275	493	4390	1050	1566	409	3025	478	3547	1209	5234	515	1747	207	2469	15118
Apprch %	14.2	74.6	11.2		34.7	51.8	13.5		9.1	67.8	23.1		20.9	70.8	8.4		
Total %	4.1	21.7	3.3	29	6.9	10.4	2.7	20	3.2	23.5	8	34.6	3.4	11.6	1.4	16.3	

	Hawthorne Boulevard Southbound				Sepulveda Boulevard Westbound				Hawthorne Boulevard Northbound				Sepulveda Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	**89**	**466**	**64**	**619**	124	204	50	378	52	461	164	677	54	232	31	317	**1991**
04:15 PM	74	453	52	579	129	200	49	378	58	460	**165**	**683**	**76**	233	**33**	**342**	1982
04:30 PM	51	370	49	470	132	169	**63**	364	54	**478**	148	680	70	219	27	316	1830
04:45 PM	68	402	61	531	**135**	**212**	41	**388**	**71**	393	146	610	64	**243**	24	331	1860
Total Volume	282	1691	226	2199	520	785	203	1508	235	1792	623	2650	264	927	115	1306	7663
% App. Total	12.8	76.9	10.3		34.5	52.1	13.5		8.9	67.6	23.5		20.2	71	8.8		
PHF	.792	.907	.883	.888	.963	.926	.806	.972	.827	.937	.944	.970	.868	.954	.871	.955	.962

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City of Torrance
N/S: Hawthorne Boulevard
E/W: Sepulveda Boulevard
Weather: Clear

File Name : 21_TOR_Hawthorne_Sepulveda PM
Site Code : 05721690
Start Date : 11/30/2021



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:30 PM				04:00 PM				04:00 PM			
+0 mins.	68	402	61	531	132	169	**63**	364	52	461	164	677	54	232	31	317
+15 mins.	**90**	421	67	578	135	212	41	388	58	460	**165**	**683**	**76**	233	**33**	**342**
+30 mins.	82	**447**	**69**	**598**	121	204	49	374	54	**478**	148	680	70	219	27	316
+45 mins.	82	354	68	504	**138**	**226**	53	**417**	**71**	393	146	610	64	**243**	24	331
Total Volume	322	1624	265	2211	526	811	206	1543	235	1792	623	2650	264	927	115	1306
% App. Total	14.6	73.5	12		34.1	52.6	13.4		8.9	67.6	23.5		20.2	71	8.8	
PHF	.894	.908	.960	.924	.953	.897	.817	.925	.827	.937	.944	.970	.868	.954	.871	.955

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City of Torrance
N/S: Madison Street
E/W: Sepulveda Boulevard
Weather: Clear

File Name : 22_TOR_Madison_Sepulveda AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

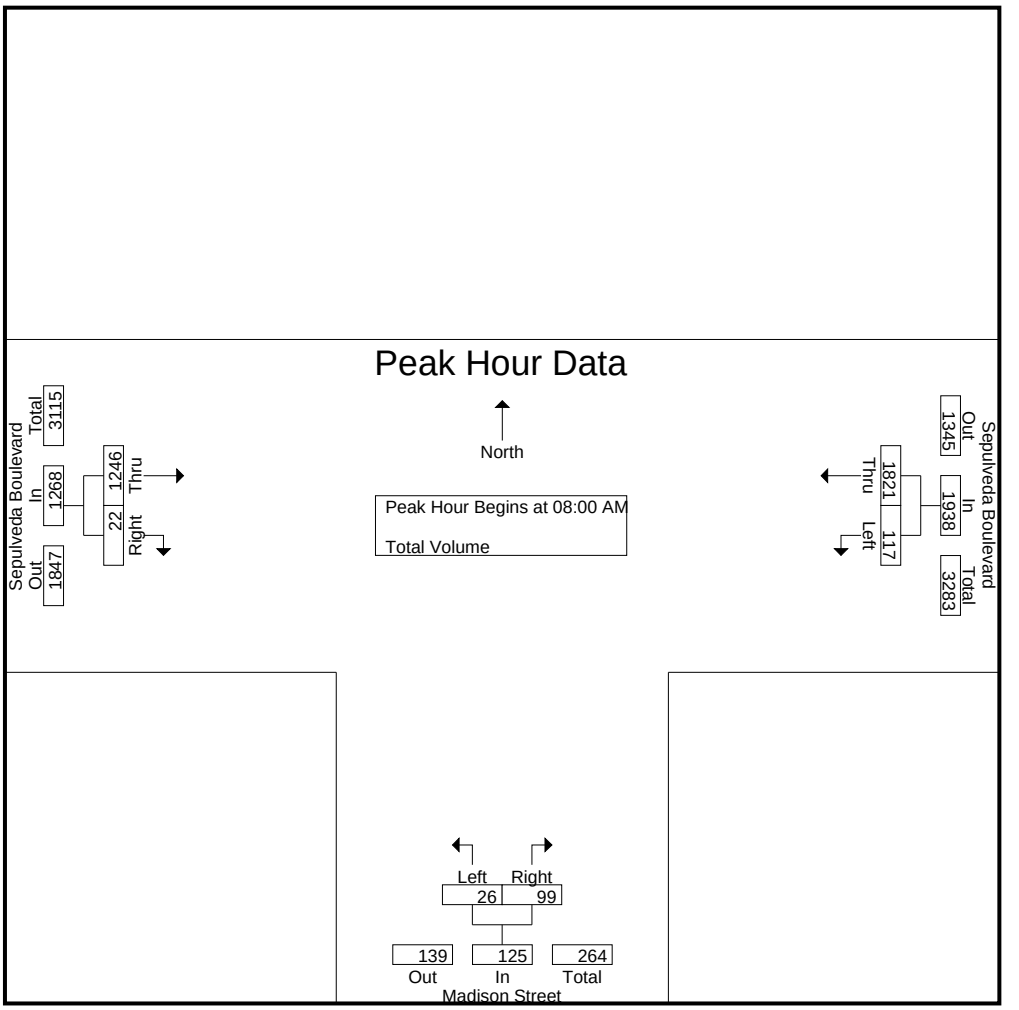
	Sepulveda Boulevard Westbound			Madison Street Northbound			Sepulveda Boulevard Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	8	224	232	3	19	22	189	3	192	446
07:15 AM	15	311	326	5	33	38	178	1	179	543
07:30 AM	17	398	415	4	40	44	242	1	243	702
07:45 AM	28	377	405	7	29	36	255	0	255	696
Total	68	1310	1378	19	121	140	864	5	869	2387
08:00 AM	41	410	451	2	20	22	278	2	280	753
08:15 AM	25	425	450	7	36	43	305	3	308	801
08:30 AM	18	495	513	11	22	33	312	7	319	865
08:45 AM	33	491	524	6	21	27	351	10	361	912
Total	117	1821	1938	26	99	125	1246	22	1268	3331
Grand Total	185	3131	3316	45	220	265	2110	27	2137	5718
Apprch %	5.6	94.4		17	83		98.7	1.3		
Total %	3.2	54.8	58	0.8	3.8	4.6	36.9	0.5	37.4	

	Sepulveda Boulevard Westbound			Madison Street Northbound			Sepulveda Boulevard Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	**41**	410	451	2	20	22	278	2	280	753
08:15 AM	25	425	450	7	**36**	**43**	305	3	308	801
08:30 AM	18	**495**	513	**11**	22	33	312	7	319	865
08:45 AM	33	491	**524**	6	21	27	**351**	**10**	**361**	**912**
Total Volume	117	1821	1938	26	99	125	1246	22	1268	3331
% App. Total	6	94		20.8	79.2		98.3	1.7		
PHF	.713	.920	.925	.591	.688	.727	.887	.550	.878	.913

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City of Torrance
N/S: Madison Street
E/W: Sepulveda Boulevard
Weather: Clear

File Name : 22_TOR_Madison_Sepulveda AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			07:30 AM			08:00 AM		
+0 mins.	**41**	410	451	4	**40**	**44**	278	2	280
+15 mins.	25	425	450	**7**	29	36	305	3	308
+30 mins.	18	**495**	513	2	20	22	312	7	319
+45 mins.	33	491	**524**	7	36	43	**351**	**10**	**361**
Total Volume	117	1821	1938	20	125	145	1246	22	1268
% App. Total	6	94		13.8	86.2		98.3	1.7	
PHF	.713	.920	.925	.714	.781	.824	.887	.550	.878

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City of Torrance
N/S: Madison Street
E/W: Sepulveda Boulevard
Weather: Clear

File Name : 22_TOR_Madison_Sepulveda PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

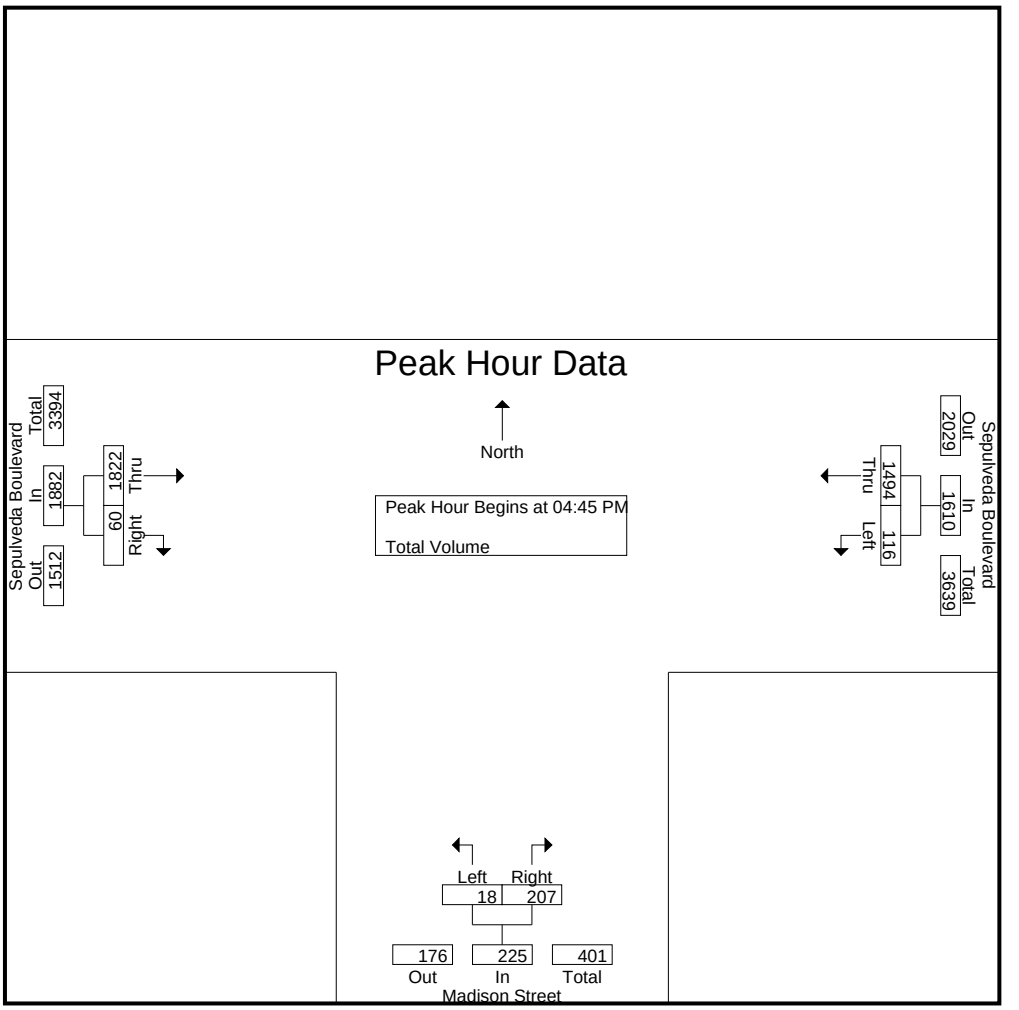
	Sepulveda Boulevard Westbound			Madison Street Northbound			Sepulveda Boulevard Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	26	361	387	12	45	57	470	12	482	926
04:15 PM	20	380	400	9	55	64	505	12	517	981
04:30 PM	37	336	373	14	54	68	438	10	448	889
04:45 PM	33	363	396	4	39	43	423	13	436	875
Total	116	1440	1556	39	193	232	1836	47	1883	3671
05:00 PM	22	369	391	7	57	64	457	16	473	928
05:15 PM	37	417	454	3	62	65	461	18	479	998
05:30 PM	24	345	369	4	49	53	481	13	494	916
05:45 PM	29	335	364	4	33	37	435	6	441	842
Total	112	1466	1578	18	201	219	1834	53	1887	3684
Grand Total	228	2906	3134	57	394	451	3670	100	3770	7355
Apprch %	7.3	92.7		12.6	87.4		97.3	2.7		
Total %	3.1	39.5	42.6	0.8	5.4	6.1	49.9	1.4	51.3	

	Sepulveda Boulevard Westbound			Madison Street Northbound			Sepulveda Boulevard Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	33	363	396	4	39	43	423	13	436	875
05:00 PM	22	369	391	**7**	57	64	457	16	473	928
05:15 PM	**37**	**417**	**454**	3	**62**	**65**	461	**18**	479	**998**
05:30 PM	24	345	369	4	49	53	**481**	13	**494**	916
Total Volume	116	1494	1610	18	207	225	1822	60	1882	3717
% App. Total	7.2	92.8		8	92		96.8	3.2		
PHF	.784	.896	.887	.643	.835	.865	.947	.833	.952	.931

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City of Torrance
N/S: Madison Street
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Weather: Clear

File Name : 22_TOR_Madison_Sepulveda PM
Site Code : 05721690
Start Date : 11/30/2021



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM			04:30 PM			05:00 PM		
+0 mins.	**37**	336	373	**14**	54	**68**	457	16	473
+15 mins.	33	363	396	4	39	43	461	**18**	479
+30 mins.	22	369	391	7	57	64	**481**	13	**494**
+45 mins.	37	**417**	**454**	3	**62**	65	435	6	441
Total Volume	129	1485	1614	28	212	240	1834	53	1887
% App. Total	8	92		11.7	88.3		97.2	2.8	
PHF	.872	.890	.889	.500	.855	.882	.953	.736	.955

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City of Torrance
N/S: Del Amo Circle East
E/W: Sepulveda Boulevard
Weather: Clear

File Name : 23_TOR_Del Amo Cir_Sepulveda AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

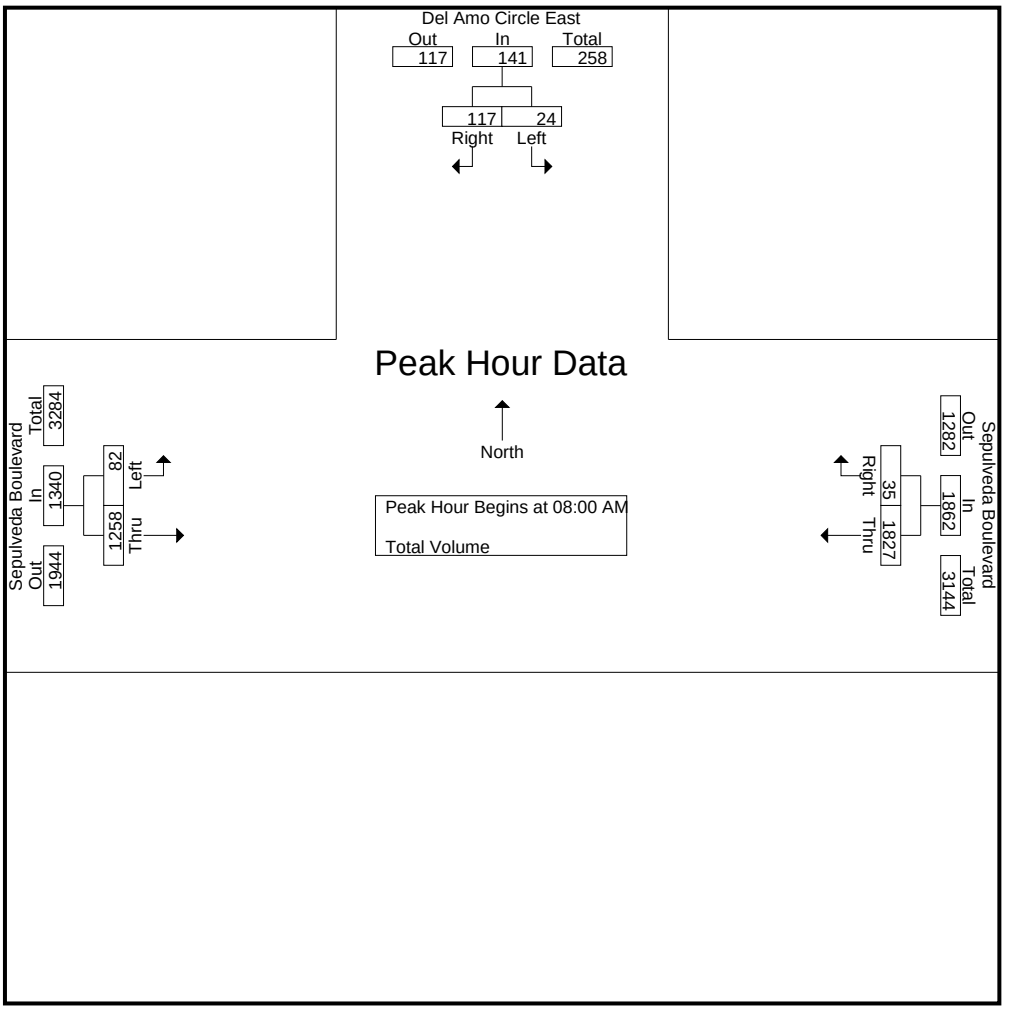
	Del Amo Circle East Southbound			Sepulveda Boulevard Westbound			Sepulveda Boulevard Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
07:00 AM	2	8	10	226	2	228	10	198	208	446
07:15 AM	3	10	13	311	2	313	8	204	212	538
07:30 AM	5	18	23	393	6	399	12	271	283	705
07:45 AM	2	21	23	383	10	393	13	272	285	701
Total	12	57	69	1313	20	1333	43	945	988	2390
08:00 AM	9	21	30	432	6	438	16	290	306	774
08:15 AM	4	29	33	422	9	431	18	322	340	804
08:30 AM	7	36	43	479	10	489	21	306	327	859
08:45 AM	4	31	35	494	10	504	27	340	367	906
Total	24	117	141	1827	35	1862	82	1258	1340	3343
Grand Total	36	174	210	3140	55	3195	125	2203	2328	5733
Apprch %	17.1	82.9		98.3	1.7		5.4	94.6		
Total %	0.6	3	3.7	54.8	1	55.7	2.2	38.4	40.6	

	Del Amo Circle East Southbound			Sepulveda Boulevard Westbound			Sepulveda Boulevard Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	**9**	21	30	432	6	438	16	290	306	774
08:15 AM	4	29	33	422	9	431	18	322	340	804
08:30 AM	7	**36**	**43**	479	**10**	489	21	306	327	859
08:45 AM	4	31	35	**494**	10	**504**	**27**	**340**	**367**	**906**
Total Volume	24	117	141	1827	35	1862	82	1258	1340	3343
% App. Total	17	83		98.1	1.9		6.1	93.9		
PHF	.667	.813	.820	.925	.875	.924	.759	.925	.913	.922

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City of Torrance
N/S: Del Amo Circle East
E/W: Sepulveda Boulevard
Weather: Clear

File Name : 23_TOR_Del Amo Cir_Sepulveda AM
Site Code : 05721690
Start Date : 11/30/2021



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			08:00 AM			08:00 AM		
+0 mins.	**9**	21	30	432	6	438	16	290	306
+15 mins.	4	29	33	422	9	431	18	322	340
+30 mins.	7	**36**	**43**	479	**10**	489	21	306	327
+45 mins.	4	31	35	**494**	10	**504**	**27**	**340**	**367**
Total Volume	24	117	141	1827	35	1862	82	1258	1340
% App. Total	17	83		98.1	1.9		6.1	93.9	
PHF	.667	.813	.820	.925	.875	.924	.759	.925	.913

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Weather: Clear

File Name : 23_TOR_Del Amo Cir_Sepulveda PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

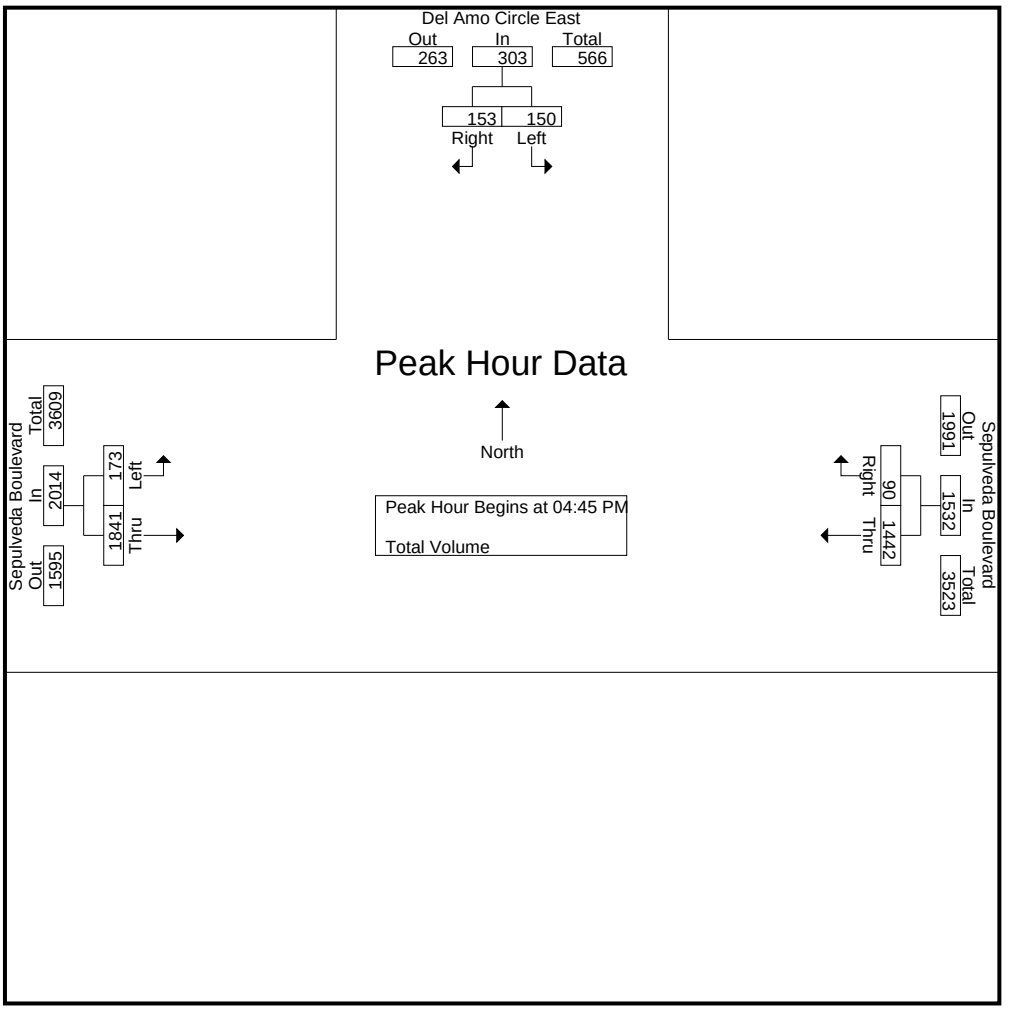
	Del Amo Circle East Southbound			Sepulveda Boulevard Westbound			Sepulveda Boulevard Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
04:00 PM	32	33	65	351	19	370	29	487	516	951
04:15 PM	26	37	63	365	26	391	42	515	557	1011
04:30 PM	27	42	69	333	30	363	41	452	493	925
04:45 PM	36	40	76	348	23	371	47	410	457	904
Total	121	152	273	1397	98	1495	159	1864	2023	3791
05:00 PM	26	35	61	362	26	388	46	464	510	959
05:15 PM	53	50	103	399	20	419	40	481	521	1043
05:30 PM	35	28	63	333	21	354	40	486	526	943
05:45 PM	38	50	88	315	21	336	32	436	468	892
Total	152	163	315	1409	88	1497	158	1867	2025	3837
Grand Total	273	315	588	2806	186	2992	317	3731	4048	7628
Apprch %	46.4	53.6		93.8	6.2		7.8	92.2		
Total %	3.6	4.1	7.7	36.8	2.4	39.2	4.2	48.9	53.1	

	Del Amo Circle East Southbound			Sepulveda Boulevard Westbound			Sepulveda Boulevard Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	36	40	76	348	23	371	**47**	410	457	904
05:00 PM	26	35	61	362	**26**	388	46	464	510	959
05:15 PM	**53**	**50**	**103**	**399**	20	**419**	40	481	521	**1043**
05:30 PM	35	28	63	333	21	354	40	**486**	**526**	943
Total Volume	150	153	303	1442	90	1532	173	1841	2014	3849
% App. Total	49.5	50.5		94.1	5.9		8.6	91.4		
PHF	.708	.765	.735	.904	.865	.914	.920	.947	.957	.923

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City of Torrance
N/S: Del Amo Circle East
E/W: Sepulveda Boulevard
Weather: Clear

File Name : 23_TOR_Del Amo Cir_Sepulveda PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			04:30 PM			05:00 PM		
+0 mins.	26	35	61	333	**30**	363	**46**	464	510
+15 mins.	**53**	**50**	**103**	348	23	371	40	481	521
+30 mins.	35	28	63	362	26	388	40	**486**	**526**
+45 mins.	38	50	88	**399**	20	**419**	32	436	468
Total Volume	152	163	315	1442	99	1541	158	1867	2025
% App. Total	48.3	51.7		93.6	6.4		7.8	92.2	
PHF	.717	.815	.765	.904	.825	.919	.859	.960	.962

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City of Torrance
N/S: Madrona Avenue
E/W: Sepulveda Boulevard
Weather: Clear

File Name : 24_TOR_Madrona_Sepulveda AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

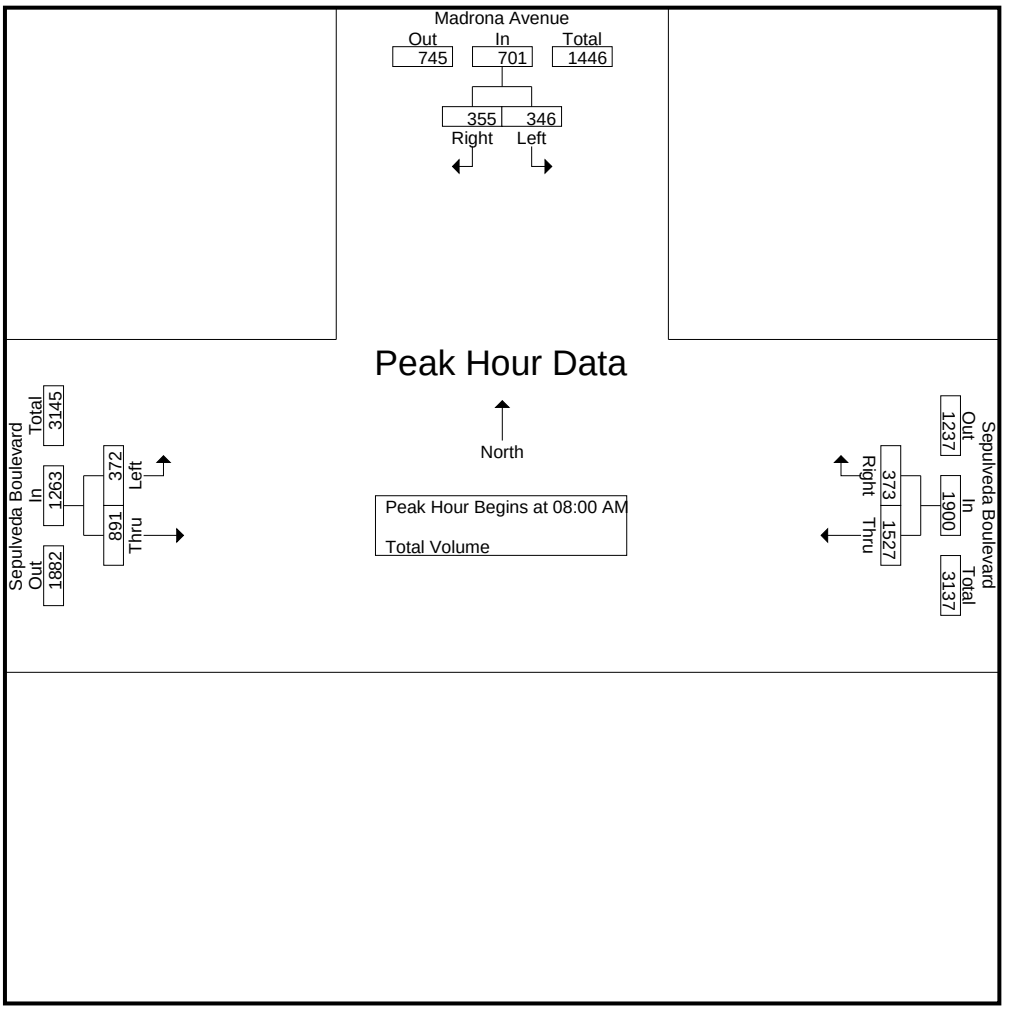
	Madrona Avenue Southbound			Sepulveda Boulevard Westbound			Sepulveda Boulevard Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
07:00 AM	48	40	88	201	61	262	50	137	187	537
07:15 AM	34	44	78	282	80	362	73	144	217	657
07:30 AM	60	81	141	304	90	394	63	202	265	800
07:45 AM	80	76	156	305	82	387	99	175	274	817
Total	222	241	463	1092	313	1405	285	658	943	2811
08:00 AM	83	72	155	372	101	473	95	194	289	917
08:15 AM	96	88	184	335	76	411	96	214	310	905
08:30 AM	79	83	162	432	88	520	90	211	301	983
08:45 AM	88	112	200	388	108	496	91	272	363	1059
Total	346	355	701	1527	373	1900	372	891	1263	3864
Grand Total	568	596	1164	2619	686	3305	657	1549	2206	6675
Apprch %	48.8	51.2		79.2	20.8		29.8	70.2		
Total %	8.5	8.9	17.4	39.2	10.3	49.5	9.8	23.2	33	

	Madrona Avenue Southbound			Sepulveda Boulevard Westbound			Sepulveda Boulevard Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	83	72	155	372	101	473	95	194	289	917
08:15 AM	**96**	88	184	335	76	411	**96**	214	310	905
08:30 AM	79	83	162	**432**	88	**520**	90	211	301	983
08:45 AM	88	**112**	**200**	388	**108**	496	91	**272**	**363**	**1059**
Total Volume	346	355	701	1527	373	1900	372	891	1263	3864
% App. Total	49.4	50.6		80.4	19.6		29.5	70.5		
PHF	.901	.792	.876	.884	.863	.913	.969	.819	.870	.912

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City of Torrance
N/S: Madrona Avenue
E/W: Sepulveda Boulevard
Weather: Clear

File Name : 24_TOR_Madrona_Sepulveda AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			08:00 AM			08:00 AM		
+0 mins.	83	72	155	372	101	473	95	194	289
+15 mins.	**96**	88	184	335	76	411	**96**	214	310
+30 mins.	79	83	162	**432**	88	**520**	90	211	301
+45 mins.	88	**112**	**200**	388	**108**	496	91	**272**	**363**
Total Volume	346	355	701	1527	373	1900	372	891	1263
% App. Total	49.4	50.6		80.4	19.6		29.5	70.5	
PHF	.901	.792	.876	.884	.863	.913	.969	.819	.870

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City of Torrance
N/S: Madrona Avenue
E/W: Sepulveda Boulevard
Weather: Clear

File Name : 24_TOR_Madrona_Sepulveda PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

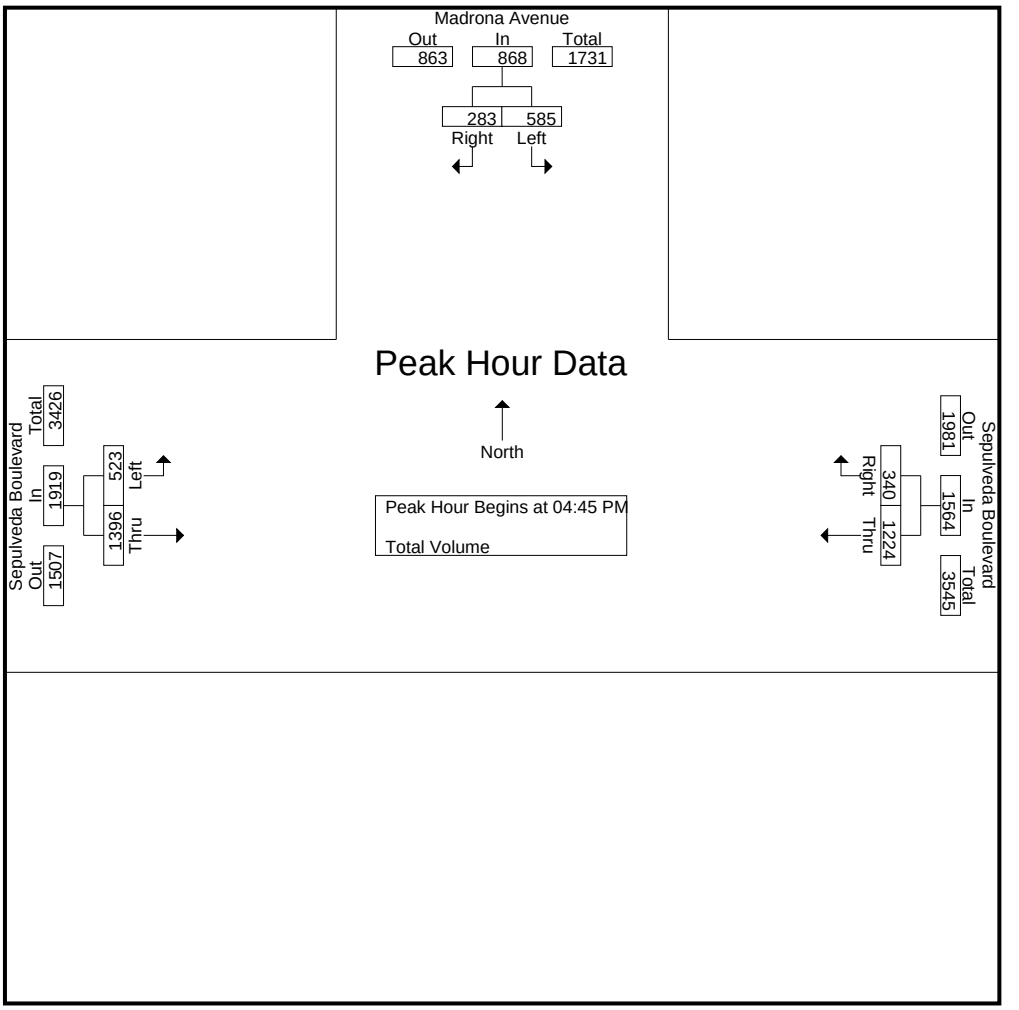
	Madrona Avenue Southbound			Sepulveda Boulevard Westbound			Sepulveda Boulevard Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
04:00 PM	136	81	217	296	74	370	121	369	490	1077
04:15 PM	137	66	203	307	75	382	124	394	518	1103
04:30 PM	133	74	207	280	70	350	150	330	480	1037
04:45 PM	129	72	201	287	84	371	119	316	435	1007
Total	535	293	828	1170	303	1473	514	1409	1923	4224
05:00 PM	144	61	205	327	92	419	122	351	473	1097
05:15 PM	174	86	260	311	83	394	141	367	508	1162
05:30 PM	138	64	202	299	81	380	141	362	503	1085
05:45 PM	143	64	207	255	66	321	124	330	454	982
Total	599	275	874	1192	322	1514	528	1410	1938	4326
Grand Total	1134	568	1702	2362	625	2987	1042	2819	3861	8550
Apprch %	66.6	33.4		79.1	20.9		27	73		
Total %	13.3	6.6	19.9	27.6	7.3	34.9	12.2	33	45.2	

	Madrona Avenue Southbound			Sepulveda Boulevard Westbound			Sepulveda Boulevard Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	129	72	201	287	84	371	119	316	435	1007
05:00 PM	144	61	205	**327**	**92**	**419**	122	351	473	1097
05:15 PM	**174**	**86**	**260**	311	83	394	**141**	**367**	**508**	**1162**
05:30 PM	138	64	202	299	81	380	141	362	503	1085
Total Volume	585	283	868	1224	340	1564	523	1396	1919	4351
% App. Total	67.4	32.6		78.3	21.7		27.3	72.7		
PHF	.841	.823	.835	.936	.924	.933	.927	.951	.944	.936

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City of Torrance
N/S: Madrona Avenue
E/W: Sepulveda Boulevard
Weather: Clear

File Name : 24_TOR_Madrona_Sepulveda PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			04:45 PM			05:00 PM		
+0 mins.	144	61	205	287	84	371	122	351	473
+15 mins.	**174**	**86**	**260**	**327**	**92**	**419**	**141**	**367**	**508**
+30 mins.	138	64	202	311	83	394	141	362	503
+45 mins.	143	64	207	299	81	380	124	330	454
Total Volume	599	275	874	1224	340	1564	528	1410	1938
% App. Total	68.5	31.5		78.3	21.7		27.2	72.8	
PHF	.861	.799	.840	.936	.924	.933	.936	.960	.954

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City of Torrance
N/S: Maple Avenue
E/W: Sepulveda Boulevard
Weather: Clear

File Name : 25_TOR_Maple_Sepulveda AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

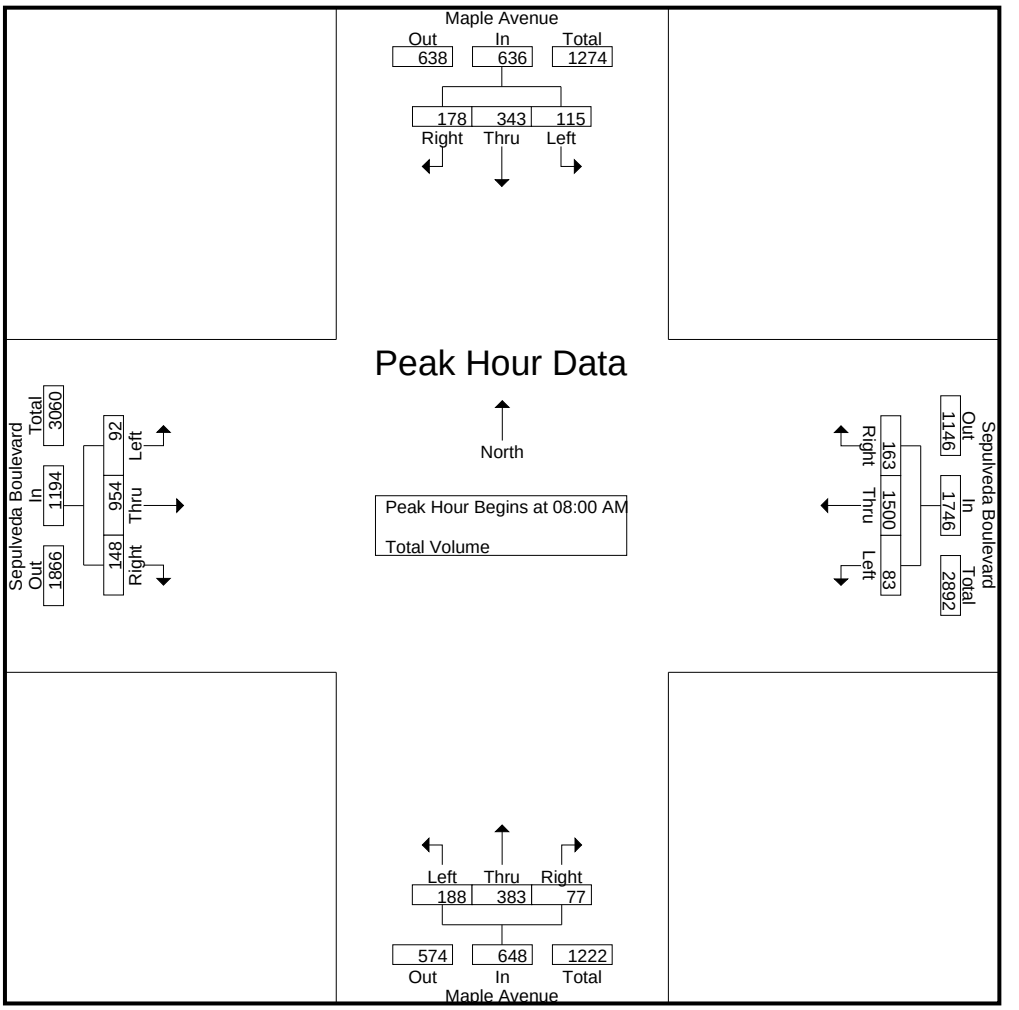
	Maple Avenue Southbound				Sepulveda Boulevard Westbound				Maple Avenue Northbound				Sepulveda Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	5	21	3	29	7	202	14	223	32	34	14	80	3	145	19	167	499
07:15 AM	3	22	16	41	4	309	15	328	31	35	11	77	4	159	16	179	625
07:30 AM	6	48	26	80	9	343	23	375	58	83	24	165	7	184	26	217	837
07:45 AM	13	36	22	71	9	377	28	414	35	77	13	125	13	211	44	268	878
Total	27	127	67	221	29	1231	80	1340	156	229	62	447	27	699	105	831	2839
08:00 AM	18	52	27	97	7	343	28	378	43	74	10	127	16	205	43	264	866
08:15 AM	16	56	35	107	22	362	29	413	41	82	14	137	21	250	40	311	968
08:30 AM	44	140	68	252	24	380	40	444	59	97	26	182	22	231	28	281	1159
08:45 AM	37	95	48	180	30	415	66	511	45	130	27	202	33	268	37	338	1231
Total	115	343	178	636	83	1500	163	1746	188	383	77	648	92	954	148	1194	4224
Grand Total	142	470	245	857	112	2731	243	3086	344	612	139	1095	119	1653	253	2025	7063
Apprch %	16.6	54.8	28.6		3.6	88.5	7.9		31.4	55.9	12.7		5.9	81.6	12.5		
Total %	2	6.7	3.5	12.1	1.6	38.7	3.4	43.7	4.9	8.7	2	15.5	1.7	23.4	3.6	28.7	

	Maple Avenue Southbound				Sepulveda Boulevard Westbound				Maple Avenue Northbound				Sepulveda Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	18	52	27	97	7	343	28	378	43	74	10	127	16	205	**43**	264	866
08:15 AM	16	56	35	107	22	362	29	413	41	82	14	137	21	250	40	311	968
08:30 AM	**44**	**140**	**68**	**252**	24	380	40	444	**59**	97	26	182	22	231	28	281	1159
08:45 AM	37	95	48	180	**30**	**415**	**66**	**511**	45	**130**	**27**	**202**	**33**	**268**	37	**338**	**1231**
Total Volume	115	343	178	636	83	1500	163	1746	188	383	77	648	92	954	148	1194	4224
% App. Total	18.1	53.9	28		4.8	85.9	9.3		29	59.1	11.9		7.7	79.9	12.4		
PHF	.653	.613	.654	.631	.692	.904	.617	.854	.797	.737	.713	.802	.697	.890	.860	.883	.858

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City of Torrance
N/S: Maple Avenue
E/W: Sepulveda Boulevard
Weather: Clear

File Name : 25_TOR_Maple_Sepulveda AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	18	52	27	97	7	343	28	378	43	74	10	127	16	205	**43**	264
+15 mins.	16	56	35	107	22	362	29	413	41	82	14	137	21	250	40	311
+30 mins.	**44**	**140**	**68**	**252**	24	380	40	444	**59**	97	26	182	22	231	28	281
+45 mins.	37	95	48	180	**30**	**415**	**66**	**511**	45	**130**	**27**	**202**	**33**	**268**	37	**338**
Total Volume	115	343	178	636	83	1500	163	1746	188	383	77	648	92	954	148	1194
% App. Total	18.1	53.9	28		4.8	85.9	9.3		29	59.1	11.9		7.7	79.9	12.4	
PHF	.653	.613	.654	.631	.692	.904	.617	.854	.797	.737	.713	.802	.697	.890	.860	.883

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City of Torrance
N/S: Maple Avenue
E/W: Sepulveda Boulevard
Weather: Clear

File Name : 25_TOR_Maple_Sepulveda PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

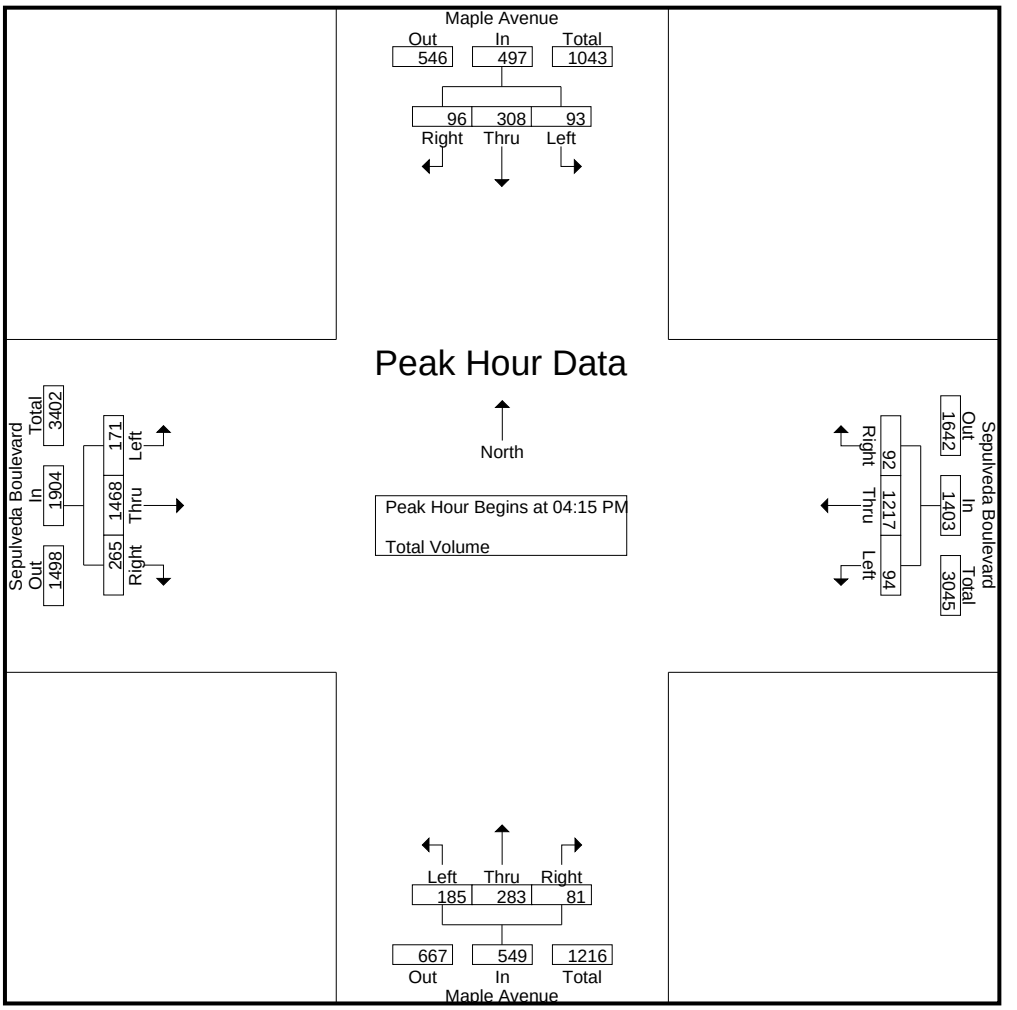
	Maple Avenue Southbound				Sepulveda Boulevard Westbound				Maple Avenue Northbound				Sepulveda Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	28	80	25	133	17	285	24	326	51	54	24	129	33	356	78	467	1055
04:15 PM	18	71	24	113	31	329	20	380	43	67	20	130	53	409	72	534	1157
04:30 PM	29	84	23	136	24	275	21	320	44	78	26	148	42	354	61	457	1061
04:45 PM	15	73	19	107	20	309	33	362	43	74	16	133	46	360	60	466	1068
Total	90	308	91	489	92	1198	98	1388	181	273	86	540	174	1479	271	1924	4341
05:00 PM	31	80	30	141	19	304	18	341	55	64	19	138	30	345	72	447	1067
05:15 PM	17	75	18	110	21	301	29	351	44	74	18	136	45	378	94	517	1114
05:30 PM	16	83	14	113	19	299	28	346	42	55	25	122	35	382	90	507	1088
05:45 PM	19	67	23	109	24	266	13	303	29	38	14	81	37	379	67	483	976
Total	83	305	85	473	83	1170	88	1341	170	231	76	477	147	1484	323	1954	4245
Grand Total	173	613	176	962	175	2368	186	2729	351	504	162	1017	321	2963	594	3878	8586
Apprch %	18	63.7	18.3		6.4	86.8	6.8		34.5	49.6	15.9		8.3	76.4	15.3		
Total %	2	7.1	2	11.2	2	27.6	2.2	31.8	4.1	5.9	1.9	11.8	3.7	34.5	6.9	45.2	

	Maple Avenue Southbound				Sepulveda Boulevard Westbound				Maple Avenue Northbound				Sepulveda Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	18	71	24	113	**31**	**329**	20	**380**	43	67	20	130	**53**	**409**	**72**	**534**	**1157**
04:30 PM	29	**84**	23	136	24	275	21	320	44	**78**	**26**	**148**	42	354	61	457	1061
04:45 PM	15	73	19	107	20	309	**33**	362	43	74	16	133	46	360	60	466	1068
05:00 PM	**31**	80	**30**	**141**	19	304	18	341	**55**	64	19	138	30	345	72	447	1067
Total Volume	93	308	96	497	94	1217	92	1403	185	283	81	549	171	1468	265	1904	4353
% App. Total	18.7	62	19.3		6.7	86.7	6.6		33.7	51.5	14.8		9	77.1	13.9		
PHF	.750	.917	.800	.881	.758	.925	.697	.923	.841	.907	.779	.927	.807	.897	.920	.891	.941

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City of Torrance
N/S: Maple Avenue
E/W: Sepulveda Boulevard
Weather: Clear

File Name : 25_TOR_Maple_Sepulveda PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:30 PM				05:00 PM			
+0 mins.	18	71	24	113	**31**	**329**	20	**380**	44	**78**	**26**	**148**	30	345	72	447
+15 mins.	29	**84**	23	136	24	275	21	320	43	74	16	133	**45**	378	**94**	**517**
+30 mins.	15	73	19	107	20	309	**33**	362	**55**	64	19	138	35	**382**	90	507
+45 mins.	**31**	80	**30**	**141**	19	304	18	341	44	74	18	136	37	379	67	483
Total Volume	93	308	96	497	94	1217	92	1403	186	290	79	555	147	1484	323	1954
% App. Total	18.7	62	19.3		6.7	86.7	6.6		33.5	52.3	14.2		7.5	75.9	16.5	
PHF	.750	.917	.800	.881	.758	.925	.697	.923	.845	.929	.760	.938	.817	.971	.859	.945

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City of Torrance
N/S: Crenshaw Boulevard
E/W: Sepulveda Boulevard
Weather: Clear

File Name : 26_TOR_Crenshaw_Sepulveda AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

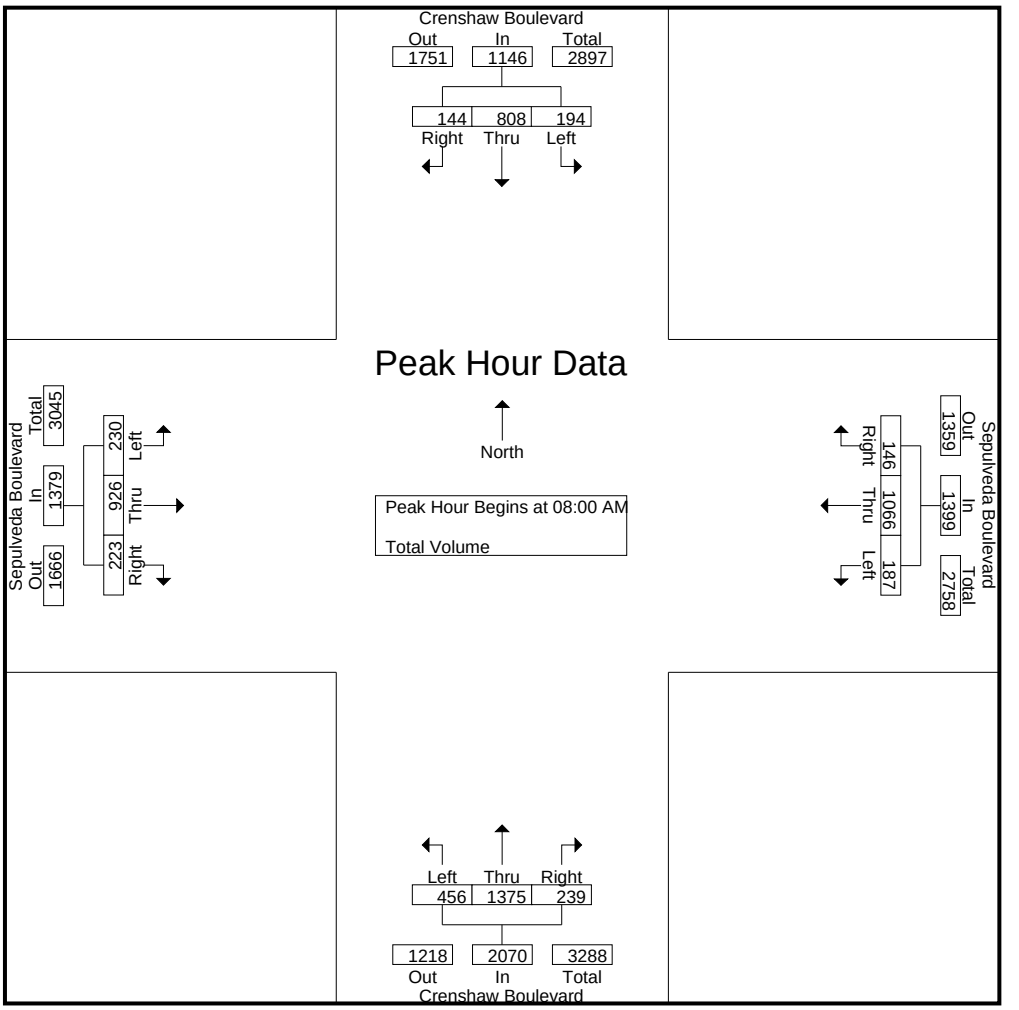
	Crenshaw Boulevard Southbound				Sepulveda Boulevard Westbound				Crenshaw Boulevard Northbound				Sepulveda Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	18	117	14	149	23	149	5	177	98	151	51	300	38	156	46	240	866
07:15 AM	31	177	17	225	34	145	11	190	134	288	65	487	32	167	36	235	1137
07:30 AM	45	166	27	238	47	226	23	296	126	284	69	479	54	258	60	372	1385
07:45 AM	47	153	42	242	43	270	25	338	152	309	56	517	41	246	58	345	1442
Total	141	613	100	854	147	790	64	1001	510	1032	241	1783	165	827	200	1192	4830
08:00 AM	33	203	37	273	44	262	22	328	118	356	62	536	50	190	43	283	1420
08:15 AM	27	173	24	224	53	235	31	319	123	314	60	497	59	256	70	385	1425
08:30 AM	56	173	39	268	45	286	51	382	131	298	56	485	51	250	58	359	1494
08:45 AM	78	259	44	381	45	283	42	370	84	407	61	552	70	230	52	352	1655
Total	194	808	144	1146	187	1066	146	1399	456	1375	239	2070	230	926	223	1379	5994
Grand Total	335	1421	244	2000	334	1856	210	2400	966	2407	480	3853	395	1753	423	2571	10824
Apprch %	16.8	71.1	12.2		13.9	77.3	8.8		25.1	62.5	12.5		15.4	68.2	16.5		
Total %	3.1	13.1	2.3	18.5	3.1	17.1	1.9	22.2	8.9	22.2	4.4	35.6	3.6	16.2	3.9	23.8	

	Crenshaw Boulevard Southbound				Sepulveda Boulevard Westbound				Crenshaw Boulevard Northbound				Sepulveda Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	33	203	37	273	44	262	22	328	118	356	**62**	536	50	190	43	283	1420
08:15 AM	27	173	24	224	**53**	235	31	319	123	314	60	497	59	**256**	**70**	**385**	1425
08:30 AM	56	173	39	268	45	**286**	**51**	**382**	**131**	298	56	485	51	250	58	359	1494
08:45 AM	**78**	**259**	**44**	**381**	45	283	42	370	84	**407**	61	**552**	**70**	230	52	352	**1655**
Total Volume	194	808	144	1146	187	1066	146	1399	456	1375	239	2070	230	926	223	1379	5994
% App. Total	16.9	70.5	12.6		13.4	76.2	10.4		22	66.4	11.5		16.7	67.2	16.2		
PHF	.622	.780	.818	.752	.882	.932	.716	.916	.870	.845	.964	.938	.821	.904	.796	.895	.905

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City of Torrance
N/S: Crenshaw Boulevard
E/W: Sepulveda Boulevard
Weather: Clear

File Name : 26_TOR_Crenshaw_Sepulveda AM
Site Code : 05721690
Start Date : 11/30/2021



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				07:30 AM			
+0 mins.	33	203	37	273	44	262	22	328	118	356	**62**	536	54	**258**	60	372
+15 mins.	27	173	24	224	**53**	235	31	319	123	314	60	497	41	246	58	345
+30 mins.	56	173	39	268	45	**286**	**51**	**382**	**131**	298	56	485	50	190	43	283
+45 mins.	**78**	**259**	**44**	**381**	45	283	42	370	84	**407**	61	**552**	**59**	256	**70**	**385**
Total Volume	194	808	144	1146	187	1066	146	1399	456	1375	239	2070	204	950	231	1385
% App. Total	16.9	70.5	12.6		13.4	76.2	10.4		22	66.4	11.5		14.7	68.6	16.7	
PHF	.622	.780	.818	.752	.882	.932	.716	.916	.870	.845	.964	.938	.864	.921	.825	.899

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File Name : 26_TOR_Crenshaw_Sepulveda PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

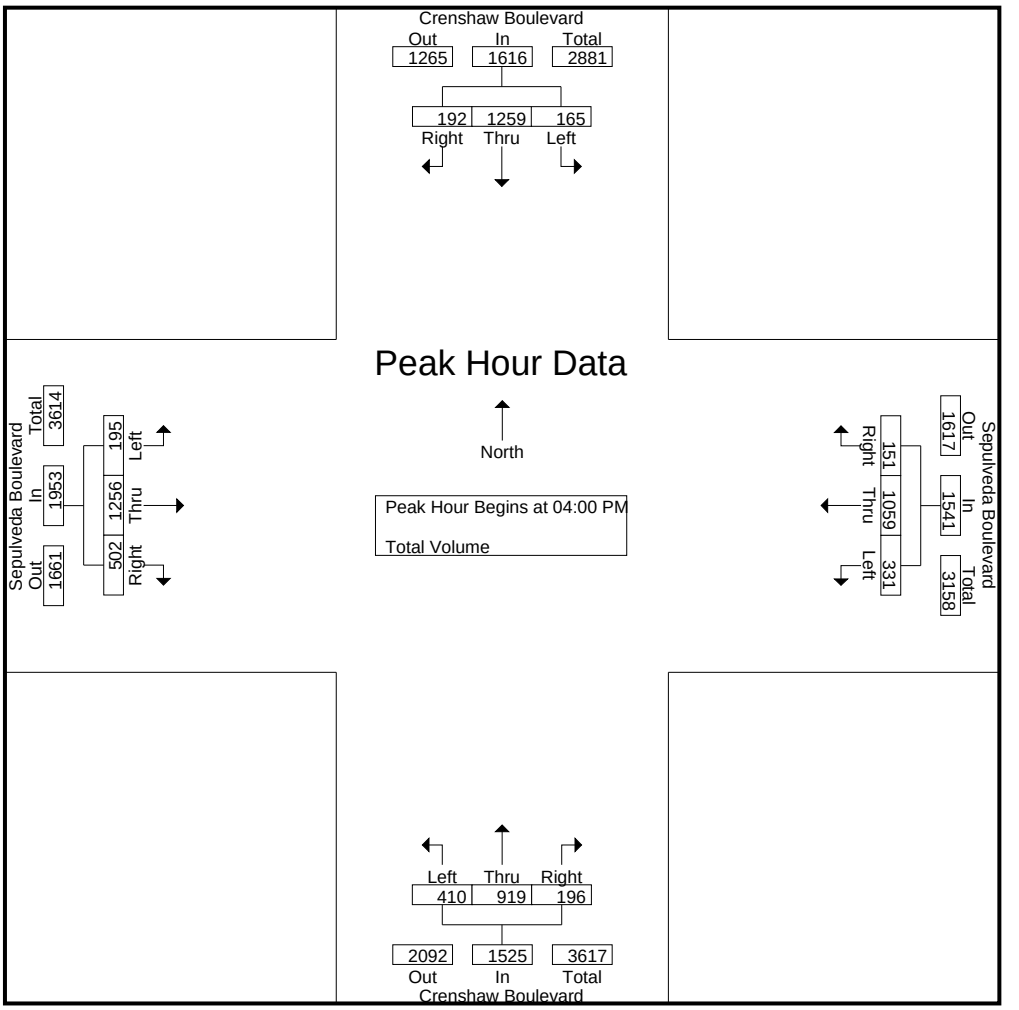
	Crenshaw Boulevard Southbound				Sepulveda Boulevard Westbound				Crenshaw Boulevard Northbound				Sepulveda Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	40	316	48	404	93	305	48	446	92	228	51	371	43	333	129	505	1726
04:15 PM	50	316	48	414	74	208	31	313	113	225	52	390	52	293	134	479	1596
04:30 PM	26	347	51	424	97	264	37	398	98	238	44	380	57	301	96	454	1656
04:45 PM	49	280	45	374	67	282	35	384	107	228	49	384	43	329	143	515	1657
Total	165	1259	192	1616	331	1059	151	1541	410	919	196	1525	195	1256	502	1953	6635
05:00 PM	42	347	54	443	108	243	26	377	109	260	56	425	58	265	137	460	1705
05:15 PM	43	307	57	407	97	232	40	369	84	237	53	374	53	283	129	465	1615
05:30 PM	56	321	43	420	79	248	35	362	115	219	54	388	42	254	114	410	1580
05:45 PM	40	290	48	378	99	258	29	386	95	249	47	391	48	262	134	444	1599
Total	181	1265	202	1648	383	981	130	1494	403	965	210	1578	201	1064	514	1779	6499
Grand Total	346	2524	394	3264	714	2040	281	3035	813	1884	406	3103	396	2320	1016	3732	13134
Apprch %	10.6	77.3	12.1		23.5	67.2	9.3		26.2	60.7	13.1		10.6	62.2	27.2		
Total %	2.6	19.2	3	24.9	5.4	15.5	2.1	23.1	6.2	14.3	3.1	23.6	3	17.7	7.7	28.4	

	Crenshaw Boulevard Southbound				Sepulveda Boulevard Westbound				Crenshaw Boulevard Northbound				Sepulveda Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	40	316	48	404	93	**305**	**48**	**446**	92	228	51	371	43	**333**	129	505	**1726**
04:15 PM	**50**	316	48	414	74	208	31	313	**113**	225	**52**	**390**	52	293	134	479	1596
04:30 PM	26	**347**	**51**	**424**	**97**	264	37	398	98	**238**	44	380	**57**	301	96	454	1656
04:45 PM	49	280	45	374	67	282	35	384	107	228	49	384	43	329	**143**	**515**	1657
Total Volume	165	1259	192	1616	331	1059	151	1541	410	919	196	1525	195	1256	502	1953	6635
% App. Total	10.2	77.9	11.9		21.5	68.7	9.8		26.9	60.3	12.9		10	64.3	25.7		
PHF	.825	.907	.941	.953	.853	.868	.786	.864	.907	.965	.942	.978	.855	.943	.878	.948	.961

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Weather: Clear

File Name : 26_TOR_Crenshaw_Sepulveda PM
Site Code : 05721690
Start Date : 11/30/2021



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:00 PM				04:15 PM				04:00 PM			
+0 mins.	**50**	316	48	414	93	**305**	**48**	**446**	**113**	225	52	390	43	**333**	129	505
+15 mins.	26	**347**	51	424	74	208	31	313	98	238	44	380	52	293	134	479
+30 mins.	49	280	45	374	**97**	264	37	398	107	228	49	384	**57**	301	96	454
+45 mins.	42	347	**54**	**443**	67	282	35	384	109	**260**	**56**	**425**	43	329	**143**	**515**
Total Volume	167	1290	198	1655	331	1059	151	1541	427	951	201	1579	195	1256	502	1953
% App. Total	10.1	77.9	12		21.5	68.7	9.8		27	60.2	12.7		10	64.3	25.7	
PHF	.835	.929	.917	.934	.853	.868	.786	.864	.945	.914	.897	.929	.855	.943	.878	.948

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City of Torrance
N/S: Western Avenue (SR-213)
E/W: Carson Street
Weather: Clear

File Name : 27_TOR_Western_Carson AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 1

Groups Printed- Total Volume

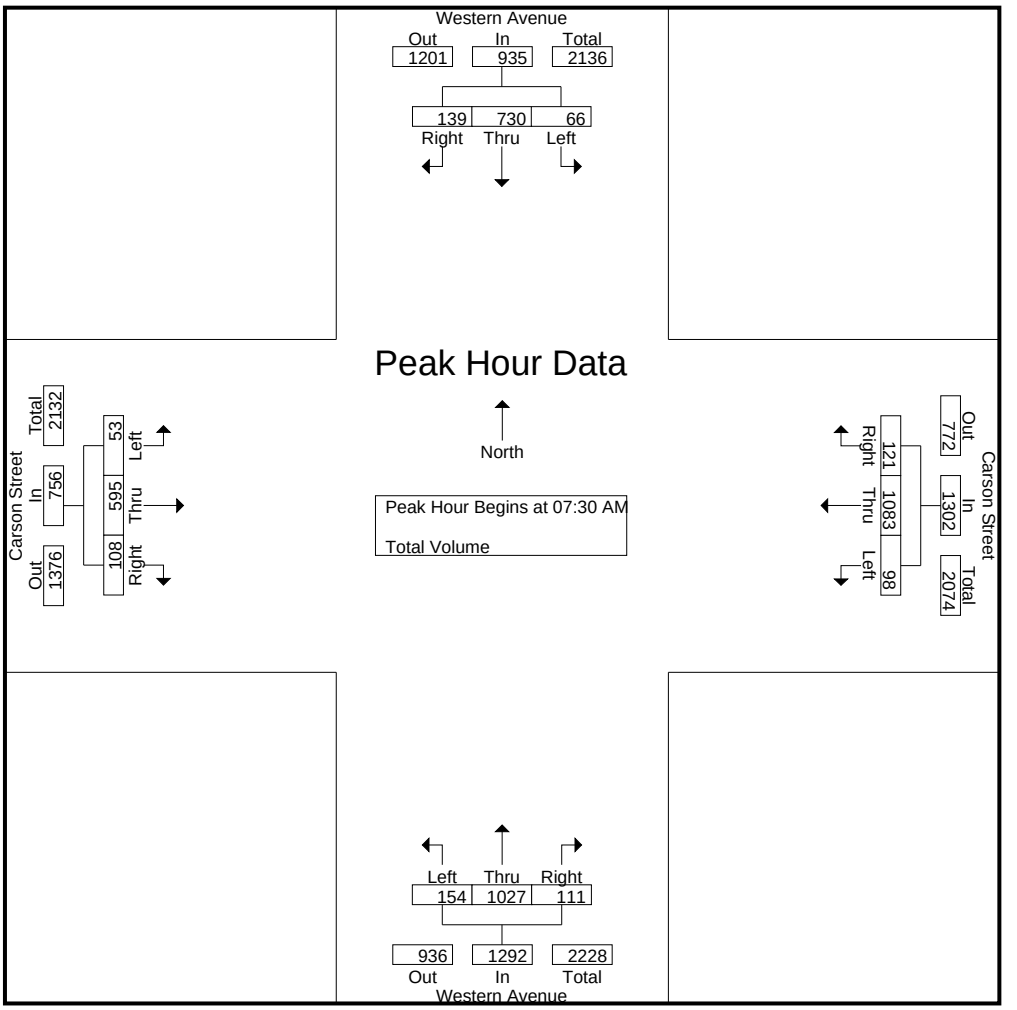
	Western Avenue Southbound				Carson Street Westbound				Western Avenue Northbound				Carson Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	18	127	19	164	27	179	31	237	15	159	15	189	10	90	14	114	704
07:15 AM	15	154	23	192	24	206	38	268	21	249	19	289	13	105	18	136	885
07:30 AM	7	206	38	251	21	260	33	314	37	259	23	319	11	146	19	176	1060
07:45 AM	22	198	35	255	23	287	37	347	43	252	29	324	12	193	34	239	1165
Total	62	685	115	862	95	932	139	1166	116	919	86	1121	46	534	85	665	3814
08:00 AM	14	157	23	194	27	297	23	347	38	227	34	299	13	129	23	165	1005
08:15 AM	23	169	43	235	27	239	28	294	36	289	25	350	17	127	32	176	1055
08:30 AM	17	162	30	209	16	182	33	231	38	258	27	323	13	130	22	165	928
08:45 AM	19	157	43	219	27	191	40	258	40	244	23	307	13	143	24	180	964
Total	73	645	139	857	97	909	124	1130	152	1018	109	1279	56	529	101	686	3952
Grand Total	135	1330	254	1719	192	1841	263	2296	268	1937	195	2400	102	1063	186	1351	7766
Apprch %	7.9	77.4	14.8		8.4	80.2	11.5		11.2	80.7	8.1		7.5	78.7	13.8		
Total %	1.7	17.1	3.3	22.1	2.5	23.7	3.4	29.6	3.5	24.9	2.5	30.9	1.3	13.7	2.4	17.4	

	Western Avenue Southbound				Carson Street Westbound				Western Avenue Northbound				Carson Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	7	**206**	38	251	21	260	33	314	37	259	23	319	11	146	19	176	1060
07:45 AM	22	198	35	**255**	23	287	**37**	**347**	**43**	252	29	324	12	**193**	**34**	**239**	**1165**
08:00 AM	14	157	23	194	**27**	**297**	23	347	38	227	**34**	299	13	129	23	165	1005
08:15 AM	**23**	169	**43**	235	27	239	28	294	36	**289**	25	**350**	**17**	127	32	176	1055
Total Volume	66	730	139	935	98	1083	121	1302	154	1027	111	1292	53	595	108	756	4285
% App. Total	7.1	78.1	14.9		7.5	83.2	9.3		11.9	79.5	8.6		7	78.7	14.3		
PHF	.717	.886	.808	.917	.907	.912	.818	.938	.895	.888	.816	.923	.779	.771	.794	.791	.920

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City of Torrance
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Weather: Clear

File Name : 27_TOR_Western_Carson AM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:45 AM				07:30 AM			
+0 mins.	7	**206**	38	251	21	260	33	314	**43**	252	29	324	11	146	19	176
+15 mins.	22	198	35	**255**	23	287	**37**	**347**	38	227	**34**	299	12	**193**	**34**	**239**
+30 mins.	14	157	23	194	**27**	**297**	23	347	36	**289**	25	**350**	13	129	23	165
+45 mins.	**23**	169	**43**	235	27	239	28	294	38	258	27	323	**17**	127	32	176
Total Volume	66	730	139	935	98	1083	121	1302	155	1026	115	1296	53	595	108	756
% App. Total	7.1	78.1	14.9		7.5	83.2	9.3		12	79.2	8.9		7	78.7	14.3	
PHF	.717	.886	.808	.917	.907	.912	.818	.938	.901	.888	.846	.926	.779	.771	.794	.791

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File Name : 27_TOR_Western_Carson PM
Site Code : 05721690
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Page No : 1

Groups Printed- Total Volume

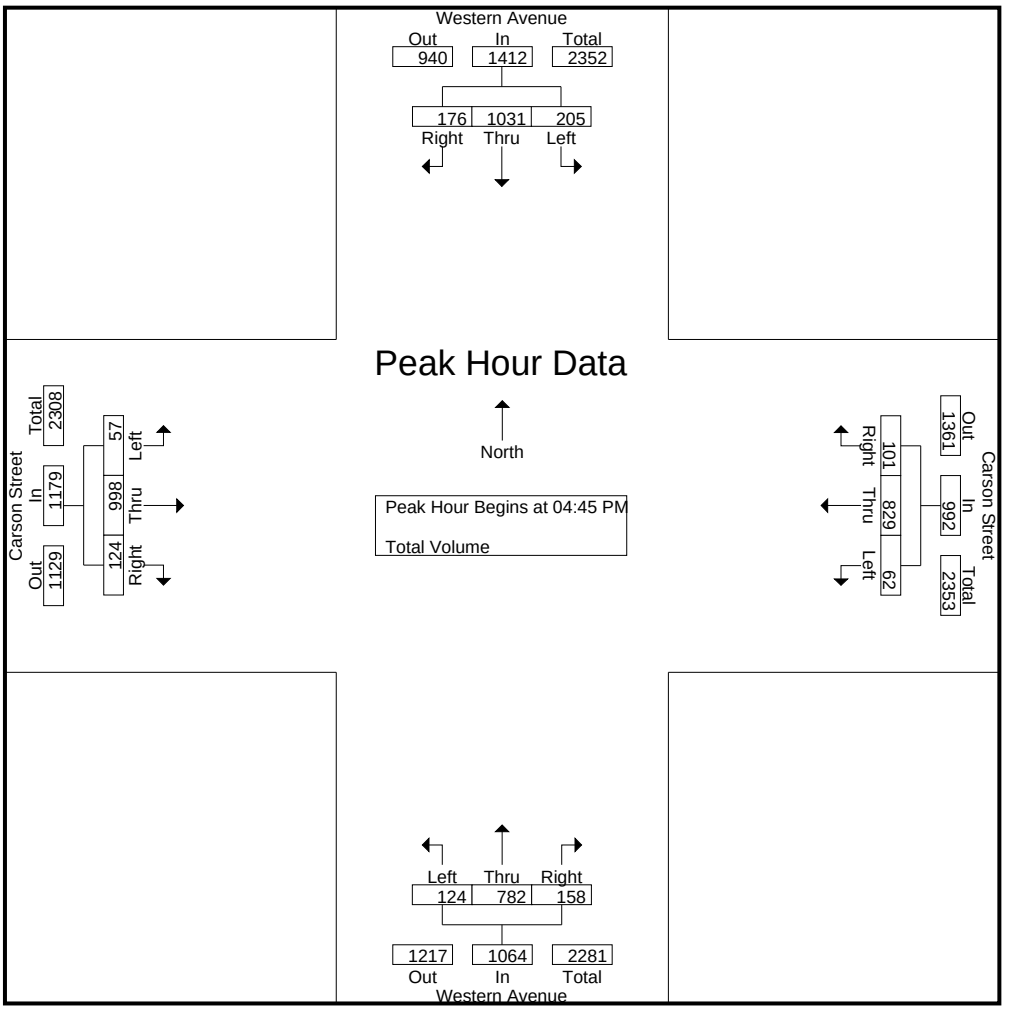
	Western Avenue Southbound				Carson Street Westbound				Western Avenue Northbound				Carson Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	53	279	41	373	20	177	32	229	30	178	46	254	24	254	17	295	1151
04:15 PM	63	233	41	337	18	199	24	241	39	188	35	262	15	239	22	276	1116
04:30 PM	58	242	37	337	15	212	40	267	37	217	40	294	16	239	31	286	1184
04:45 PM	62	268	30	360	13	203	26	242	22	168	46	236	15	253	28	296	1134
Total	236	1022	149	1407	66	791	122	979	128	751	167	1046	70	985	98	1153	4585
05:00 PM	55	241	44	340	16	191	27	234	39	204	34	277	13	246	43	302	1153
05:15 PM	38	249	45	332	14	223	27	264	35	195	41	271	17	251	22	290	1157
05:30 PM	50	273	57	380	19	212	21	252	28	215	37	280	12	248	31	291	1203
05:45 PM	55	269	47	371	17	190	30	237	38	149	31	218	13	264	25	302	1128
Total	198	1032	193	1423	66	816	105	987	140	763	143	1046	55	1009	121	1185	4641
Grand Total	434	2054	342	2830	132	1607	227	1966	268	1514	310	2092	125	1994	219	2338	9226
Apprch %	15.3	72.6	12.1		6.7	81.7	11.5		12.8	72.4	14.8		5.3	85.3	9.4		
Total %	4.7	22.3	3.7	30.7	1.4	17.4	2.5	21.3	2.9	16.4	3.4	22.7	1.4	21.6	2.4	25.3	

	Western Avenue Southbound				Carson Street Westbound				Western Avenue Northbound				Carson Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**62**	268	30	360	13	203	26	242	22	168	**46**	236	15	**253**	28	296	1134
05:00 PM	55	241	44	340	16	191	**27**	234	**39**	204	34	277	13	246	**43**	**302**	1153
05:15 PM	38	249	45	332	14	**223**	27	**264**	35	195	41	271	**17**	251	22	290	1157
05:30 PM	50	**273**	**57**	**380**	**19**	212	21	252	28	**215**	37	**280**	12	248	31	291	**1203**
Total Volume	205	1031	176	1412	62	829	101	992	124	782	158	1064	57	998	124	1179	4647
% App. Total	14.5	73	12.5		6.2	83.6	10.2		11.7	73.5	14.8		4.8	84.6	10.5		
PHF	.827	.944	.772	.929	.816	.929	.935	.939	.795	.909	.859	.950	.838	.986	.721	.976	.966

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File Name : 27_TOR_Western_Carson PM
Site Code : 05721690
Start Date : 11/30/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:30 PM				04:30 PM				05:00 PM			
+0 mins.	**55**	241	44	340	15	212	**40**	**267**	37	**217**	40	**294**	13	246	**43**	**302**
+15 mins.	38	249	45	332	13	203	26	242	22	168	**46**	236	**17**	251	22	290
+30 mins.	50	**273**	**57**	**380**	**16**	191	27	234	**39**	204	34	277	12	248	31	291
+45 mins.	55	269	47	371	14	**223**	27	264	35	195	41	271	13	**264**	25	302
Total Volume	198	1032	193	1423	58	829	120	1007	133	784	161	1078	55	1009	121	1185
% App. Total	13.9	72.5	13.6		5.8	82.3	11.9		12.3	72.7	14.9		4.6	85.1	10.2	
PHF	.900	.945	.846	.936	.906	.929	.750	.943	.853	.903	.875	.917	.809	.955	.703	.981

APPENDIX B

LEVEL OF SERVICE CALCULATION WORKSHEETS

APPENDIX B-I

EXISTING TRAFFIC CONDITIONS

Intersection Level Of Service Report
Intersection 1: I-405 NB On-Ramp at Redondo Beach Boulevard

Control Type:	Two-way stop	Delay (sec / veh):	13.0
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.199

Intersection Setup

Name	I-405 NB On-Ramp		Redondo Beach Boulevard		Redondo Beach Boulevard	
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 Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	I-405 NB On-Ramp		Redondo Beach Boulevard		Redondo Beach Boulevard	
Base Volume Input [veh/h]	0	0	111	883	623	616
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	0	0	111	883	623	616
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]	0	0	28	221	156	154
Total Analysis Volume [veh/h]	0	0	111	883	623	616
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			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.20	0.01	0.01	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	13.05	0.00	0.00	0.00
Movement LOS			B	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.74	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	18.39	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		1.46		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.65					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 2: Prairie Avenue at Redondo Beach Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.917

Intersection Setup

Name	Prairie Avenue			Prairie Avenue			Redondo Beach Boulevard			Redondo Beach Boulevard		
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 Entry Pocket	1	0	1	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Prairie Avenue			Prairie Avenue			Redondo Beach Boulevard			Redondo Beach Boulevard		
Base Volume Input [veh/h]	307	522	179	128	878	195	109	510	221	209	707	153
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 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
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
Total Hourly Volume [veh/h]	307	522	179	128	878	195	109	510	221	209	707	153
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]	77	131	45	32	220	49	27	128	55	52	177	38
Total Analysis Volume [veh/h]	307	522	179	128	878	195	109	510	221	209	707	153
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.19	0.16	0.11	0.08	0.34	0.34	0.07	0.16	0.14	0.13	0.22	0.10
Intersection LOS	E											
Intersection V/C	0.917											

Intersection Level Of Service Report
Intersection 3: Prairie Avenue at Artesia Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.778

Intersection Setup

Name	Prairie Avenue			Prairie Avenue			Artesia Boulevard			Artesia Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Prairie Avenue			Prairie Avenue			Artesia Boulevard			Artesia Boulevard		
Base Volume Input [veh/h]	68	843	479	246	1031	33	28	851	64	354	907	111
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 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
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
Total Hourly Volume [veh/h]	68	843	479	246	1031	33	28	851	64	354	907	111
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]	17	211	120	62	258	8	7	213	16	89	227	28
Total Analysis Volume [veh/h]	68	843	479	246	1031	33	28	851	64	354	907	111
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.18	0.18	0.15	0.32	0.02	0.02	0.19	0.19	0.12	0.28	0.07
Intersection LOS	C											
Intersection V/C	0.778											

Intersection Level Of Service Report
Intersection 4: Prairie Avenue at W 182nd Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.768

Intersection Setup

Name	Prairie Avenue			Prairie Avenue			W 182nd Street			W 182nd 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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Prairie Avenue			Prairie Avenue			W 182nd Street			W 182nd Street		
Base Volume Input [veh/h]	72	916	140	129	1088	103	199	279	52	279	356	151
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 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
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
Total Hourly Volume [veh/h]	72	916	140	129	1088	103	199	279	52	279	356	151
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]	18	229	35	32	272	26	50	70	13	70	89	38
Total Analysis Volume [veh/h]	72	916	140	129	1088	103	199	279	52	279	356	151
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	ProtPer	Permiss	Overlap	ProtPer	Permiss	Overlap	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	1	6	6	5	2	2	3	8	0	7	4	0
Auxiliary Signal Groups			6,7			2,3						
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.29	0.09	0.08	0.34	0.06	0.12	0.10	0.10	0.17	0.16	0.16
Intersection LOS	C											
Intersection V/C	0.768											

Intersection Level Of Service Report
Intersection 5: Prairie Avenue at W 190th Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.732

Intersection Setup

Name	Prairie Avenue			Prairie Avenue			W 190th Street			W 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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Prairie Avenue			Prairie Avenue			W 190th Street			W 190th Street		
Base Volume Input [veh/h]	60	827	479	67	1138	178	118	706	80	559	892	76
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 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
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
Total Hourly Volume [veh/h]	60	827	479	67	1138	178	118	706	80	559	892	76
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]	15	207	120	17	285	45	30	177	20	140	223	19
Total Analysis Volume [veh/h]	60	827	479	67	1138	178	118	706	80	559	892	76
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.17	0.11	0.04	0.24	0.11	0.07	0.16	0.16	0.19	0.20	0.20
Intersection LOS	C											
Intersection V/C	0.732											

Intersection Level Of Service Report
Intersection 6: Madrona Avenue at Del Amo Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.722

Intersection Setup

Name	Madrona Avenue			Madrona Avenue			Del Amo Boulevard			Del Amo Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Madrona Avenue			Madrona Avenue			Del Amo Boulevard			Del Amo Boulevard		
Base Volume Input [veh/h]	130	927	141	135	1179	322	329	477	103	146	694	110
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 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
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
Total Hourly Volume [veh/h]	130	927	141	135	1179	322	329	477	103	146	694	110
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]	33	232	35	34	295	81	82	119	26	37	174	28
Total Analysis Volume [veh/h]	130	927	141	135	1179	322	329	477	103	146	694	110
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.19	0.09	0.05	0.25	0.20	0.11	0.15	0.06	0.05	0.22	0.07
Intersection LOS	C											
Intersection V/C	0.722											

Intersection Level Of Service Report
Intersection 7: Anza Avenue at Torrance Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.738

Intersection Setup

Name	Anza Avenue			Anza Avenue			Torrance Boulevard			Torrance Boulevard		
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 Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Anza Avenue			Anza Avenue			Torrance Boulevard			Torrance Boulevard		
Base Volume Input [veh/h]	204	705	131	134	724	117	102	758	218	108	691	112
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 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
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
Total Hourly Volume [veh/h]	204	705	131	134	724	117	102	758	218	108	691	112
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]	51	176	33	34	181	29	26	190	55	27	173	28
Total Analysis Volume [veh/h]	204	705	131	134	724	117	102	758	218	108	691	112
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.26	0.26	0.05	0.26	0.26	0.06	0.24	0.14	0.07	0.22	0.07
Intersection LOS	C											
Intersection V/C	0.738											

Intersection Level Of Service Report
Intersection 8: Hawthorne Boulevard at Torrance Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.678

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Torrance Boulevard			Torrance Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Torrance Boulevard			Torrance Boulevard		
Base Volume Input [veh/h]	215	1093	143	142	1446	210	235	745	138	326	940	147
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 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
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
Total Hourly Volume [veh/h]	215	1093	143	142	1446	210	235	745	138	326	940	147
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]	54	273	36	36	362	53	59	186	35	82	235	37
Total Analysis Volume [veh/h]	215	1093	143	142	1446	210	235	745	138	326	940	147
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

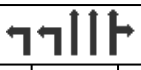
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.17	0.09	0.05	0.23	0.13	0.08	0.16	0.09	0.11	0.20	0.09
Intersection LOS	B											
Intersection V/C	0.678											

Intersection Level Of Service Report
Intersection 9: Madrona Avenue at Torrance Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.699

Intersection Setup

Name	Madrona Avenue			Madrona Avenue			Torrance Boulevard			Torrance Boulevard		
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 Entry Pocket	1	0	0	1	0	1	1	0	1	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Madrona Avenue			Madrona Avenue			Torrance Boulevard			Torrance Boulevard		
Base Volume Input [veh/h]	167	889	90	107	1080	328	253	566	98	145	995	100
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 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
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
Total Hourly Volume [veh/h]	167	889	90	107	1080	328	253	566	98	145	995	100
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]	42	222	23	27	270	82	63	142	25	36	249	25
Total Analysis Volume [veh/h]	167	889	90	107	1080	328	253	566	98	145	995	100
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.20	0.20	0.04	0.23	0.21	0.09	0.18	0.06	0.05	0.23	0.23
Intersection LOS	B											
Intersection V/C	0.699											

Intersection Level Of Service Report
Intersection 10: Maple Avenue at Torrance Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.663

Intersection Setup

Name	Maple Avenue			Maple Avenue			Torrance Boulevard			Torrance Boulevard		
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 Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Maple Avenue			Maple Avenue			Torrance Boulevard			Torrance Boulevard		
Base Volume Input [veh/h]	51	184	31	20	93	69	71	662	42	37	1103	86
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 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
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
Total Hourly Volume [veh/h]	51	184	31	20	93	69	71	662	42	37	1103	86
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	46	8	5	23	17	18	166	11	9	276	22
Total Analysis Volume [veh/h]	51	184	31	20	93	69	71	662	42	37	1103	86
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.13	0.13	0.01	0.06	0.04	0.04	0.22	0.22	0.02	0.37	0.37
Intersection LOS	B											
Intersection V/C	0.663											

Intersection Level Of Service Report
Intersection 11: Crenshaw Boulevard at Torrance Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.668

Intersection Setup

Name	Crenshaw Boulevard			Crenshaw Boulevard			Torrance Boulevard			Torrance Boulevard		
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 Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Crenshaw Boulevard			Crenshaw Boulevard			Torrance Boulevard			Torrance Boulevard		
Base Volume Input [veh/h]	139	1172	166	73	1093	79	128	588	92	205	1054	116
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 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
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
Total Hourly Volume [veh/h]	139	1172	166	73	1093	79	128	588	92	205	1054	116
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]	35	293	42	18	273	20	32	147	23	51	264	29
Total Analysis Volume [veh/h]	139	1172	166	73	1093	79	128	588	92	205	1054	116
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.28	0.28	0.03	0.24	0.24	0.04	0.18	0.06	0.07	0.22	0.07
Intersection LOS	B											
Intersection V/C	0.668											

Intersection Level Of Service Report
Intersection 12: Hawthorne Boulevard at Fashion Way

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.453

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Fashion Way			Fashion Way		
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 Entry Pocket	1	0	1	1	0	1	0	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Fashion Way			Fashion Way		
Base Volume Input [veh/h]	63	1331	85	69	1790	72	40	0	41	52	25	59
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 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
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
Total Hourly Volume [veh/h]	63	1331	85	69	1790	72	40	0	41	52	25	59
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]	16	333	21	17	448	18	10	0	10	13	6	15
Total Analysis Volume [veh/h]	63	1331	85	69	1790	72	40	0	41	52	25	59
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Permiss	Overlap	Split	Split	Overlap
Signal Group	1	6	0	5	2	0	3	0	3	0	4	4
Auxiliary Signal Groups									1,3			4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.21	0.05	0.02	0.28	0.05	0.03	0.00	0.00	0.02	0.03	0.01
Intersection LOS	A											
Intersection V/C	0.453											

Intersection Level Of Service Report
Intersection 13: Madrona Avenue at Fashion Way

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.377

Intersection Setup

Name	Madrona Avenue		Madrona Avenue			Fashion Way	
Approach	Northbound		Southbound			Eastbound	
Lane Configuration							
Turning Movement	Left	Thru	U-turn	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	0	1	1	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00			30.00	
Grade [%]	0.00		0.00			0.00	
Crosswalk	Yes		No			Yes	

Volumes

Name	Madrona Avenue		Madrona Avenue			Fashion Way	
Base Volume Input [veh/h]	94	1126	2	1091	157	48	28
Base Volume Adjustment Factor	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
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	94	1126	2	1091	157	48	28
Peak Hour Factor	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
Total 15-Minute Volume [veh/h]	24	282	1	273	39	12	7
Total Analysis Volume [veh/h]	94	1126	2	1091	157	48	28
Pedestrian Volume [ped/h]	0		0			0	
Bicycle Volume [bicycles/h]	0		0			0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protected	Permissive	Protected	Permissive	Overlap	Permissive	Permissive
Signal Group	1	6	5	2	2	3	0
Auxiliary Signal Groups					2,3		
Lead / Lag	Lead	-	Lead	-	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.23	0.00	0.23	0.08	0.02	0.02
Intersection LOS	A						
Intersection V/C	0.377						

Intersection Level Of Service Report
Intersection 14: Anza Avenue at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.732

Intersection Setup

Name	Anza Avenue			Anza Avenue			Carson Street			Carson 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 Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Anza Avenue			Anza Avenue			Carson Street			Carson Street		
Base Volume Input [veh/h]	28	783	245	149	794	28	27	207	50	164	192	194
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 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
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
Total Hourly Volume [veh/h]	28	783	245	149	794	28	27	207	50	164	192	194
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	196	61	37	199	7	7	52	13	41	48	49
Total Analysis Volume [veh/h]	28	783	245	149	794	28	27	207	50	164	192	194
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.32	0.32	0.09	0.26	0.26	0.02	0.16	0.16	0.06	0.12	0.12
Intersection LOS	C											
Intersection V/C	0.732											

Intersection Level Of Service Report
Intersection 15: Hawthorne Boulevard at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.694

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Carson Street			Carson 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 Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Carson Street			Carson Street		
Base Volume Input [veh/h]	111	1327	141	123	1617	67	64	455	69	281	534	144
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 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
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
Total Hourly Volume [veh/h]	111	1327	141	123	1617	67	64	455	69	281	534	144
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]	28	332	35	31	404	17	16	114	17	70	134	36
Total Analysis Volume [veh/h]	111	1327	141	123	1617	67	64	455	69	281	534	144
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.21	0.09	0.04	0.26	0.26	0.04	0.16	0.16	0.10	0.11	0.09
Intersection LOS	B											
Intersection V/C	0.694											

Intersection Level Of Service Report
Intersection 16: Del Amo Circle E at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.353

Intersection Setup

Name	Del Amo Circle E			Del Amo Circle E			Carson Street			Carson 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 Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Del Amo Circle E			Del Amo Circle E			Carson Street			Carson Street		
Base Volume Input [veh/h]	44	20	26	5	13	12	17	642	48	47	996	41
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 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
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
Total Hourly Volume [veh/h]	44	20	26	5	13	12	17	642	48	47	996	41
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]	11	5	7	1	3	3	4	161	12	12	249	10
Total Analysis Volume [veh/h]	44	20	26	5	13	12	17	642	48	47	996	41
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	4	0	0	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.01	0.01	0.00	0.01	0.01	0.01	0.13	0.03	0.03	0.21	0.03
Intersection LOS	A											
Intersection V/C	0.353											

Intersection Level Of Service Report
Intersection 17: Madrona Avenue at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.581

Intersection Setup

Name	Madrona Avenue			Madrona Avenue			Carson Street			Carson 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 Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Madrona Avenue			Madrona Avenue			Carson Street			Carson Street		
Base Volume Input [veh/h]	78	839	103	155	762	170	117	539	31	44	843	172
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 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
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
Total Hourly Volume [veh/h]	78	839	103	155	762	170	117	539	31	44	843	172
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]	20	210	26	39	191	43	29	135	8	11	211	43
Total Analysis Volume [veh/h]	78	839	103	155	762	170	117	539	31	44	843	172
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.17	0.06	0.05	0.16	0.11	0.04	0.11	0.02	0.03	0.21	0.21
Intersection LOS	A											
Intersection V/C	0.581											

Intersection Level Of Service Report
Intersection 18: Maple Avenue at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.697

Intersection Setup

Name	Maple Avenue			Maple Avenue			Carson Street			Carson 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 Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Maple Avenue			Maple Avenue			Carson Street			Carson Street		
Base Volume Input [veh/h]	103	292	151	35	207	23	18	728	69	91	917	68
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 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
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
Total Hourly Volume [veh/h]	103	292	151	35	207	23	18	728	69	91	917	68
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]	26	73	38	9	52	6	5	182	17	23	229	17
Total Analysis Volume [veh/h]	103	292	151	35	207	23	18	728	69	91	917	68
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	4	0	0	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.28	0.28	0.02	0.14	0.14	0.01	0.23	0.04	0.06	0.29	0.04
Intersection LOS	B											
Intersection V/C	0.697											

Intersection Level Of Service Report
Intersection 19: Crenshaw Boulevard at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.771

Intersection Setup

Name	Crenshaw Boulevard			Crenshaw Boulevard			Carson Street			Carson 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 Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Crenshaw Boulevard			Crenshaw Boulevard			Carson Street			Carson Street		
Base Volume Input [veh/h]	96	1086	195	159	1086	101	198	646	58	293	1028	201
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 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
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
Total Hourly Volume [veh/h]	96	1086	195	159	1086	101	198	646	58	293	1028	201
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]	24	272	49	40	272	25	50	162	15	73	257	50
Total Analysis Volume [veh/h]	96	1086	195	159	1086	101	198	646	58	293	1028	201
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.23	0.12	0.06	0.25	0.25	0.07	0.15	0.15	0.10	0.32	0.13
Intersection LOS	C											
Intersection V/C	0.771											

Intersection Level Of Service Report
Intersection 20: Anza Avenue at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.703

Intersection Setup

Name	Anza Avenue			Anza Avenue			Sepulveda Boulevard			Sepulveda Boulevard		
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 Entry Pocket	1	0	1	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Anza Avenue			Anza Avenue			Sepulveda Boulevard			Sepulveda Boulevard		
Base Volume Input [veh/h]	102	583	175	157	762	68	168	617	265	250	685	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 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
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
Total Hourly Volume [veh/h]	102	583	175	157	762	68	168	617	265	250	685	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]	26	146	44	39	191	17	42	154	66	63	171	59
Total Analysis Volume [veh/h]	102	583	175	157	762	68	168	617	265	250	685	237
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.18	0.11	0.10	0.26	0.26	0.06	0.19	0.17	0.09	0.21	0.15
Intersection LOS	C											
Intersection V/C	0.703											

Intersection Level Of Service Report
Intersection 21: Hawthorne Boulevard at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.785

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Sepulveda Boulevard			Sepulveda Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Sepulveda Boulevard			Sepulveda Boulevard		
Base Volume Input [veh/h]	120	1309	392	113	1696	198	224	800	77	563	1058	197
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 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
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
Total Hourly Volume [veh/h]	120	1309	392	113	1696	198	224	800	77	563	1058	197
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]	30	327	98	28	424	50	56	200	19	141	265	49
Total Analysis Volume [veh/h]	120	1309	392	113	1696	198	224	800	77	563	1058	197
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Unsigna	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.20	0.00	0.04	0.27	0.12	0.08	0.18	0.18	0.20	0.22	0.12
Intersection LOS	C											
Intersection V/C	0.785											

Intersection Level Of Service Report
Intersection 22: Madison Street at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.565

Intersection Setup

Name	Madison Street		Sepulveda Boulevard		Sepulveda Boulevard	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Madison Street		Sepulveda Boulevard		Sepulveda Boulevard	
Base Volume Input [veh/h]	26	101	1266	22	119	1850
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	26	101	1266	22	119	1850
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]	7	25	317	6	30	463
Total Analysis Volume [veh/h]	26	101	1266	22	119	1850
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.08	0.20	0.20	0.07	0.39
Intersection LOS	A					
Intersection V/C	0.565					

Intersection Level Of Service Report
Intersection 23: Del Amo Circle E at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.613

Intersection Setup

Name	Del Amo Circle E		Sepulveda Boulevard		Sepulveda Boulevard	
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 Entry Pocket	1	1	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		No	

Volumes

Name	Del Amo Circle E		Sepulveda Boulevard		Sepulveda Boulevard	
Base Volume Input [veh/h]	24	119	83	1278	1856	36
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	24	119	83	1278	1856	36
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]	6	30	21	320	464	9
Total Analysis Volume [veh/h]	24	119	83	1278	1856	36
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Overlap
Signal Group	7	0	5	2	6	6
Auxiliary Signal Groups						6,7
Lead / Lag	Lead	-	Lead	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.07	0.05	0.27	0.39	0.01
Intersection LOS	B					
Intersection V/C	0.613					

Intersection Level Of Service Report
Intersection 24: Madrona Avenue at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.676

Intersection Setup

Name	Madrona Avenue		Sepulveda Boulevard		Sepulveda Boulevard	
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 Entry Pocket	1	1	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		No	

Volumes

Name	Madrona Avenue		Sepulveda Boulevard		Sepulveda Boulevard	
Base Volume Input [veh/h]	351	361	378	905	1551	379
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	351	361	378	905	1551	379
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]	88	90	95	226	388	95
Total Analysis Volume [veh/h]	351	361	378	905	1551	379
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permissive	Overlap	Protected	Permissive	Permissive	Overlap
Signal Group	7	7	5	2	6	6
Auxiliary Signal Groups		5,7				6,7
Lead / Lag	Lead	-	Lead	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.12	0.00	0.13	0.19	0.32	0.12
Intersection LOS	B					
Intersection V/C	0.676					

Intersection Level Of Service Report
Intersection 25: Maple Avenue at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.629

Intersection Setup

Name	Maple Avenue			Maple Avenue			Sepulveda Boulevard			Sepulveda Boulevard		
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 Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Maple Avenue			Maple Avenue			Sepulveda Boulevard			Sepulveda Boulevard		
Base Volume Input [veh/h]	191	389	78	117	348	181	93	969	150	84	1524	166
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 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
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
Total Hourly Volume [veh/h]	191	389	78	117	348	181	93	969	150	84	1524	166
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]	48	97	20	29	87	45	23	242	38	21	381	42
Total Analysis Volume [veh/h]	191	389	78	117	348	181	93	969	150	84	1524	166
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.12	0.15	0.15	0.07	0.11	0.11	0.03	0.23	0.23	0.03	0.26	0.26
Intersection LOS	B											
Intersection V/C	0.629											

Intersection Level Of Service Report
Intersection 26: Crenshaw Boulevard at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.694

Intersection Setup

Name	Crenshaw Boulevard			Crenshaw Boulevard			Sepulveda Boulevard			Sepulveda Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Crenshaw Boulevard			Crenshaw Boulevard			Sepulveda Boulevard			Sepulveda Boulevard		
Base Volume Input [veh/h]	463	1397	243	197	821	146	234	941	227	190	1083	148
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 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
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
Total Hourly Volume [veh/h]	463	1397	243	197	821	146	234	941	227	190	1083	148
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]	116	349	61	49	205	37	59	235	57	48	271	37
Total Analysis Volume [veh/h]	463	1397	243	197	821	146	234	941	227	190	1083	148
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.16	0.22	0.09	0.07	0.17	0.09	0.08	0.20	0.14	0.07	0.17	0.09
Intersection LOS	B											
Intersection V/C	0.694											

Intersection Level Of Service Report
Intersection 27: Western Avenue at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.884

Intersection Setup

Name	Western Avenue			Western Avenue			Carson Street			Carson 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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Western Avenue			Western Avenue			Carson Street			Carson Street		
Base Volume Input [veh/h]	156	1043	113	67	741	141	54	604	110	100	1100	123
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 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
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
Total Hourly Volume [veh/h]	156	1043	113	67	741	141	54	604	110	100	1100	123
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]	39	261	28	17	185	35	14	151	28	25	275	31
Total Analysis Volume [veh/h]	156	1043	113	67	741	141	54	604	110	100	1100	123
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.33	0.07	0.04	0.23	0.09	0.03	0.22	0.22	0.06	0.38	0.38
Intersection LOS	D											
Intersection V/C	0.884											

Intersection Level Of Service Report
Intersection 1: I-405 NB On-Ramp at Redondo Beach Boulevard

Control Type:	Two-way stop	Delay (sec / veh):	17.9
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.510

Intersection Setup

Name	I-405 NB On-Ramp		Redondo Beach Boulevard		Redondo Beach Boulevard	
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 Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	I-405 NB On-Ramp		Redondo Beach Boulevard		Redondo Beach Boulevard	
Base Volume Input [veh/h]	0	0	287	1335	644	586
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	0	0	287	1335	644	586
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]	0	0	72	334	161	147
Total Analysis Volume [veh/h]	0	0	287	1335	644	586
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			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.51	0.01	0.01	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	17.88	0.00	0.00	0.00
Movement LOS			C	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	2.89	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	72.13	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		3.16		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.80					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 2: Prairie Avenue at Redondo Beach Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.975

Intersection Setup

Name	Prairie Avenue			Prairie Avenue			Redondo Beach Boulevard			Redondo Beach Boulevard		
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 Entry Pocket	1	0	1	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Prairie Avenue			Prairie Avenue			Redondo Beach Boulevard			Redondo Beach Boulevard		
Base Volume Input [veh/h]	325	850	237	153	710	201	151	829	301	205	667	160
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 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
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
Total Hourly Volume [veh/h]	325	850	237	153	710	201	151	829	301	205	667	160
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]	81	213	59	38	178	50	38	207	75	51	167	40
Total Analysis Volume [veh/h]	325	850	237	153	710	201	151	829	301	205	667	160
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.20	0.27	0.15	0.10	0.28	0.28	0.09	0.26	0.19	0.13	0.21	0.10
Intersection LOS	E											
Intersection V/C	0.975											

Intersection Level Of Service Report
Intersection 3: Prairie Avenue at Artesia Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.816

Intersection Setup

Name	Prairie Avenue			Prairie Avenue			Artesia Boulevard			Artesia Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Prairie Avenue			Prairie Avenue			Artesia Boulevard			Artesia Boulevard		
Base Volume Input [veh/h]	68	1125	308	179	982	56	104	983	115	396	945	209
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 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
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
Total Hourly Volume [veh/h]	68	1125	308	179	982	56	104	983	115	396	945	209
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]	17	281	77	45	246	14	26	246	29	99	236	52
Total Analysis Volume [veh/h]	68	1125	308	179	982	56	104	983	115	396	945	209
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.23	0.06	0.11	0.31	0.04	0.07	0.23	0.23	0.14	0.30	0.13
Intersection LOS	D											
Intersection V/C	0.816											

Intersection Level Of Service Report
Intersection 4: Prairie Avenue at W 182nd Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.839

Intersection Setup

Name	Prairie Avenue			Prairie Avenue			W 182nd Street			W 182nd 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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Prairie Avenue			Prairie Avenue			W 182nd Street			W 182nd Street		
Base Volume Input [veh/h]	76	1257	135	96	1201	131	167	349	110	229	356	76
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 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
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
Total Hourly Volume [veh/h]	76	1257	135	96	1201	131	167	349	110	229	356	76
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]	19	314	34	24	300	33	42	87	28	57	89	19
Total Analysis Volume [veh/h]	76	1257	135	96	1201	131	167	349	110	229	356	76
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	ProtPer	Permiss	Overlap	ProtPer	Permiss	Overlap	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	1	6	6	5	2	2	3	8	0	7	4	0
Auxiliary Signal Groups			6,7			2,3						
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.39	0.08	0.06	0.38	0.08	0.10	0.14	0.14	0.14	0.14	0.14
Intersection LOS	D											
Intersection V/C	0.839											

Intersection Level Of Service Report
Intersection 5: Prairie Avenue at W 190th Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.783

Intersection Setup

Name	Prairie Avenue			Prairie Avenue			W 190th Street			W 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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Prairie Avenue			Prairie Avenue			W 190th Street			W 190th Street		
Base Volume Input [veh/h]	117	1186	538	98	1157	211	212	1009	101	396	758	55
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 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
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
Total Hourly Volume [veh/h]	117	1186	538	98	1157	211	212	1009	101	396	758	55
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]	29	297	135	25	289	53	53	252	25	99	190	14
Total Analysis Volume [veh/h]	117	1186	538	98	1157	211	212	1009	101	396	758	55
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.25	0.20	0.06	0.24	0.13	0.13	0.23	0.23	0.14	0.17	0.17
Intersection LOS	C											
Intersection V/C	0.783											

Intersection Level Of Service Report
Intersection 6: Madrona Avenue at Del Amo Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.751

Intersection Setup

Name	Madrona Avenue			Madrona Avenue			Del Amo Boulevard			Del Amo Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Madrona Avenue			Madrona Avenue			Del Amo Boulevard			Del Amo Boulevard		
Base Volume Input [veh/h]	132	1307	181	163	1218	289	342	679	125	163	651	182
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 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
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
Total Hourly Volume [veh/h]	132	1307	181	163	1218	289	342	679	125	163	651	182
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]	33	327	45	41	305	72	86	170	31	41	163	46
Total Analysis Volume [veh/h]	132	1307	181	163	1218	289	342	679	125	163	651	182
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.27	0.11	0.06	0.25	0.18	0.12	0.21	0.08	0.06	0.20	0.11
Intersection LOS	C											
Intersection V/C	0.751											

Intersection Level Of Service Report
Intersection 7: Anza Avenue at Torrance Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.825

Intersection Setup

Name	Anza Avenue			Anza Avenue			Torrance Boulevard			Torrance Boulevard		
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 Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Anza Avenue			Anza Avenue			Torrance Boulevard			Torrance Boulevard		
Base Volume Input [veh/h]	234	900	94	135	796	134	166	756	190	160	797	187
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 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
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
Total Hourly Volume [veh/h]	234	900	94	135	796	134	166	756	190	160	797	187
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]	59	225	24	34	199	34	42	189	48	40	199	47
Total Analysis Volume [veh/h]	234	900	94	135	796	134	166	756	190	160	797	187
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.31	0.31	0.05	0.29	0.29	0.10	0.24	0.12	0.10	0.25	0.12
Intersection LOS	D											
Intersection V/C	0.825											

Intersection Level Of Service Report
Intersection 8: Hawthorne Boulevard at Torrance Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.755

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Torrance Boulevard			Torrance Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Torrance Boulevard			Torrance Boulevard		
Base Volume Input [veh/h]	266	1755	275	195	1502	179	250	931	299	342	804	185
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 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
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
Total Hourly Volume [veh/h]	266	1755	275	195	1502	179	250	931	299	342	804	185
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]	67	439	69	49	376	45	63	233	75	86	201	46
Total Analysis Volume [veh/h]	266	1755	275	195	1502	179	250	931	299	342	804	185
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.09	0.27	0.17	0.07	0.23	0.11	0.09	0.19	0.19	0.12	0.17	0.12
Intersection LOS	C											
Intersection V/C	0.755											

Intersection Level Of Service Report
Intersection 9: Madrona Avenue at Torrance Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.790

Intersection Setup

Name	Madrona Avenue			Madrona Avenue			Torrance Boulevard			Torrance Boulevard		
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 Entry Pocket	1	0	0	1	0	1	1	0	1	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Madrona Avenue			Madrona Avenue			Torrance Boulevard			Torrance Boulevard		
Base Volume Input [veh/h]	151	1070	122	170	1150	248	345	913	221	279	892	105
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 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
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
Total Hourly Volume [veh/h]	151	1070	122	170	1150	248	345	913	221	279	892	105
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]	38	268	31	43	288	62	86	228	55	70	223	26
Total Analysis Volume [veh/h]	151	1070	122	170	1150	248	345	913	221	279	892	105
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.25	0.25	0.06	0.24	0.16	0.12	0.29	0.14	0.10	0.21	0.21
Intersection LOS	C											
Intersection V/C	0.790											

Intersection Level Of Service Report
Intersection 10: Maple Avenue at Torrance Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.665

Intersection Setup

Name	Maple Avenue			Maple Avenue			Torrance Boulevard			Torrance Boulevard		
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 Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Maple Avenue			Maple Avenue			Torrance Boulevard			Torrance Boulevard		
Base Volume Input [veh/h]	45	186	28	72	225	96	67	1101	50	42	1016	37
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 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
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
Total Hourly Volume [veh/h]	45	186	28	72	225	96	67	1101	50	42	1016	37
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]	11	47	7	18	56	24	17	275	13	11	254	9
Total Analysis Volume [veh/h]	45	186	28	72	225	96	67	1101	50	42	1016	37
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.13	0.13	0.05	0.14	0.06	0.04	0.36	0.36	0.03	0.33	0.33
Intersection LOS	B											
Intersection V/C	0.665											

Intersection Level Of Service Report
Intersection 11: Crenshaw Boulevard at Torrance Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.798

Intersection Setup

Name	Crenshaw Boulevard			Crenshaw Boulevard			Torrance Boulevard			Torrance Boulevard		
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 Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Crenshaw Boulevard			Crenshaw Boulevard			Torrance Boulevard			Torrance Boulevard		
Base Volume Input [veh/h]	145	1274	187	171	1254	113	112	892	91	160	859	96
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 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
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
Total Hourly Volume [veh/h]	145	1274	187	171	1254	113	112	892	91	160	859	96
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]	36	319	47	43	314	28	28	223	23	40	215	24
Total Analysis Volume [veh/h]	145	1274	187	171	1254	113	112	892	91	160	859	96
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.30	0.30	0.06	0.28	0.28	0.04	0.28	0.06	0.06	0.18	0.06
Intersection LOS	C											
Intersection V/C	0.798											

Intersection Level Of Service Report
Intersection 12: Hawthorne Boulevard at Fashion Way

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.586

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Fashion Way			Fashion Way		
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 Entry Pocket	1	0	1	1	0	1	0	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Fashion Way			Fashion Way		
Base Volume Input [veh/h]	54	1979	194	184	1941	53	84	0	105	158	17	149
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 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
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
Total Hourly Volume [veh/h]	54	1979	194	184	1941	53	84	0	105	158	17	149
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]	14	495	49	46	485	13	21	0	26	40	4	37
Total Analysis Volume [veh/h]	54	1979	194	184	1941	53	84	0	105	158	17	149
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Permiss	Overlap	Split	Split	Overlap
Signal Group	1	6	0	5	2	0	3	0	3	0	4	4
Auxiliary Signal Groups									1,3			4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.31	0.12	0.06	0.30	0.03	0.05	0.00	0.05	0.05	0.06	0.03
Intersection LOS	A											
Intersection V/C	0.586											

Intersection Level Of Service Report
Intersection 13: Madrona Avenue at Fashion Way

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.542

Intersection Setup

Name	Madrona Avenue		Madrona Avenue			Fashion Way	
Approach	Northbound		Southbound			Eastbound	
Lane Configuration							
Turning Movement	Left	Thru	U-turn	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	0	1	1	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00			30.00	
Grade [%]	0.00		0.00			0.00	
Crosswalk	Yes		No			Yes	

Volumes

Name	Madrona Avenue		Madrona Avenue			Fashion Way	
Base Volume Input [veh/h]	73	1032	15	1312	304	291	229
Base Volume Adjustment Factor	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
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	73	1032	15	1312	304	291	229
Peak Hour Factor	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
Total 15-Minute Volume [veh/h]	18	258	4	328	76	73	57
Total Analysis Volume [veh/h]	73	1032	15	1312	304	291	229
Pedestrian Volume [ped/h]	0		0			0	
Bicycle Volume [bicycles/h]	0		0			0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protected	Permissive	Protected	Permissive	Overlap	Permissive	Permissive
Signal Group	1	6	5	2	2	3	0
Auxiliary Signal Groups					2,3		
Lead / Lag	Lead	-	Lead	-	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.22	0.01	0.27	0.09	0.10	0.14
Intersection LOS	A						
Intersection V/C	0.542						

Intersection Level Of Service Report
Intersection 14: Anza Avenue at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.771

Intersection Setup

Name	Anza Avenue			Anza Avenue			Carson Street			Carson 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 Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Anza Avenue			Anza Avenue			Carson Street			Carson Street		
Base Volume Input [veh/h]	51	1003	175	176	804	43	14	177	29	185	250	180
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 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
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
Total Hourly Volume [veh/h]	51	1003	175	176	804	43	14	177	29	185	250	180
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	251	44	44	201	11	4	44	7	46	63	45
Total Analysis Volume [veh/h]	51	1003	175	176	804	43	14	177	29	185	250	180
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.37	0.37	0.11	0.26	0.26	0.01	0.13	0.13	0.06	0.16	0.11
Intersection LOS	C											
Intersection V/C	0.771											

Intersection Level Of Service Report
Intersection 15: Hawthorne Boulevard at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.819

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Carson Street			Carson 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 Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Carson Street			Carson Street		
Base Volume Input [veh/h]	102	2102	288	311	1821	50	125	530	93	254	435	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 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
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
Total Hourly Volume [veh/h]	102	2102	288	311	1821	50	125	530	93	254	435	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]	26	526	72	78	455	13	31	133	23	64	109	51
Total Analysis Volume [veh/h]	102	2102	288	311	1821	50	125	530	93	254	435	202
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.33	0.18	0.11	0.29	0.29	0.08	0.19	0.19	0.09	0.09	0.13
Intersection LOS	D											
Intersection V/C	0.819											

Intersection Level Of Service Report
Intersection 16: Del Amo Circle E at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.478

Intersection Setup

Name	Del Amo Circle E			Del Amo Circle E			Carson Street			Carson 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 Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Del Amo Circle E			Del Amo Circle E			Carson Street			Carson Street		
Base Volume Input [veh/h]	75	93	53	102	95	73	78	1023	109	88	863	152
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 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
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
Total Hourly Volume [veh/h]	75	93	53	102	95	73	78	1023	109	88	863	152
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]	19	23	13	26	24	18	20	256	27	22	216	38
Total Analysis Volume [veh/h]	75	93	53	102	95	73	78	1023	109	88	863	152
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	4	0	0	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.05	0.05	0.06	0.05	0.05	0.05	0.21	0.07	0.06	0.18	0.10
Intersection LOS	A											
Intersection V/C	0.478											

Intersection Level Of Service Report
Intersection 17: Madrona Avenue at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.632

Intersection Setup

Name	Madrona Avenue			Madrona Avenue			Carson Street			Carson 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 Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Madrona Avenue			Madrona Avenue			Carson Street			Carson Street		
Base Volume Input [veh/h]	91	801	160	335	916	258	191	924	104	51	739	136
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 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
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
Total Hourly Volume [veh/h]	91	801	160	335	916	258	191	924	104	51	739	136
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]	23	200	40	84	229	65	48	231	26	13	185	34
Total Analysis Volume [veh/h]	91	801	160	335	916	258	191	924	104	51	739	136
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.17	0.10	0.12	0.19	0.16	0.07	0.19	0.07	0.03	0.18	0.18
Intersection LOS	B											
Intersection V/C	0.632											

Intersection Level Of Service Report
Intersection 18: Maple Avenue at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.816

Intersection Setup

Name	Maple Avenue			Maple Avenue			Carson Street			Carson 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 Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Maple Avenue			Maple Avenue			Carson Street			Carson Street		
Base Volume Input [veh/h]	68	216	90	75	253	34	27	1369	90	80	867	42
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 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
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
Total Hourly Volume [veh/h]	68	216	90	75	253	34	27	1369	90	80	867	42
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]	17	54	23	19	63	9	7	342	23	20	217	11
Total Analysis Volume [veh/h]	68	216	90	75	253	34	27	1369	90	80	867	42
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	4	0	0	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.19	0.19	0.05	0.18	0.18	0.02	0.43	0.06	0.05	0.27	0.03
Intersection LOS	D											
Intersection V/C	0.816											

Intersection Level Of Service Report
Intersection 19: Crenshaw Boulevard at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.804

Intersection Setup

Name	Crenshaw Boulevard			Crenshaw Boulevard			Carson Street			Carson 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 Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Crenshaw Boulevard			Crenshaw Boulevard			Carson Street			Carson Street		
Base Volume Input [veh/h]	105	1181	306	313	1180	143	218	1173	73	258	785	150
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 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
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
Total Hourly Volume [veh/h]	105	1181	306	313	1180	143	218	1173	73	258	785	150
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]	26	295	77	78	295	36	55	293	18	65	196	38
Total Analysis Volume [veh/h]	105	1181	306	313	1180	143	218	1173	73	258	785	150
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.25	0.19	0.11	0.28	0.28	0.08	0.26	0.26	0.09	0.25	0.09
Intersection LOS	D											
Intersection V/C	0.804											

Intersection Level Of Service Report
Intersection 20: Anza Avenue at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.790

Intersection Setup

Name	Anza Avenue			Anza Avenue			Sepulveda Boulevard			Sepulveda Boulevard		
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 Entry Pocket	1	0	1	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Anza Avenue			Anza Avenue			Sepulveda Boulevard			Sepulveda Boulevard		
Base Volume Input [veh/h]	176	751	197	178	758	101	172	780	221	194	678	271
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 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
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
Total Hourly Volume [veh/h]	176	751	197	178	758	101	172	780	221	194	678	271
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]	44	188	49	45	190	25	43	195	55	49	170	68
Total Analysis Volume [veh/h]	176	751	197	178	758	101	172	780	221	194	678	271
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.11	0.23	0.12	0.11	0.27	0.27	0.06	0.24	0.14	0.07	0.21	0.17
Intersection LOS	C											
Intersection V/C	0.790											

Intersection Level Of Service Report
Intersection 21: Hawthorne Boulevard at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.888

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Sepulveda Boulevard			Sepulveda Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Sepulveda Boulevard			Sepulveda Boulevard		
Base Volume Input [veh/h]	239	1820	633	286	1718	230	268	942	117	528	797	206
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 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
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
Total Hourly Volume [veh/h]	239	1820	633	286	1718	230	268	942	117	528	797	206
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]	60	455	158	72	430	58	67	236	29	132	199	52
Total Analysis Volume [veh/h]	239	1820	633	286	1718	230	268	942	117	528	797	206
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Unsigna	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.28	0.00	0.10	0.27	0.14	0.09	0.22	0.22	0.18	0.17	0.13
Intersection LOS	D											
Intersection V/C	0.888											

Intersection Level Of Service Report
Intersection 22: Madison Street at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.615

Intersection Setup

Name	Madison Street		Sepulveda Boulevard		Sepulveda Boulevard	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Madison Street		Sepulveda Boulevard		Sepulveda Boulevard	
Base Volume Input [veh/h]	18	210	1851	61	118	1518
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	18	210	1851	61	118	1518
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]	5	53	463	15	30	380
Total Analysis Volume [veh/h]	18	210	1851	61	118	1518
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.14	0.30	0.30	0.07	0.32
Intersection LOS	B					
Intersection V/C	0.615					

Intersection Level Of Service Report
Intersection 23: Del Amo Circle E at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.612

Intersection Setup

Name	Del Amo Circle E		Sepulveda Boulevard		Sepulveda Boulevard	
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 Entry Pocket	1	1	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		No	

Volumes

Name	Del Amo Circle E		Sepulveda Boulevard		Sepulveda Boulevard	
Base Volume Input [veh/h]	152	155	176	1870	1465	91
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	152	155	176	1870	1465	91
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]	38	39	44	468	366	23
Total Analysis Volume [veh/h]	152	155	176	1870	1465	91
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Overlap
Signal Group	7	0	5	2	6	6
Auxiliary Signal Groups						6,7
Lead / Lag	Lead	-	Lead	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.10	0.11	0.39	0.31	0.00
Intersection LOS	B					
Intersection V/C	0.612					

Intersection Level Of Service Report
Intersection 24: Madrona Avenue at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.750

Intersection Setup

Name	Madrona Avenue		Sepulveda Boulevard		Sepulveda Boulevard	
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 Entry Pocket	1	1	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		No	

Volumes

Name	Madrona Avenue		Sepulveda Boulevard		Sepulveda Boulevard	
Base Volume Input [veh/h]	594	287	531	1418	1243	345
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	594	287	531	1418	1243	345
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]	149	72	133	355	311	86
Total Analysis Volume [veh/h]	594	287	531	1418	1243	345
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permissive	Overlap	Protected	Permissive	Permissive	Overlap
Signal Group	7	7	5	2	6	6
Auxiliary Signal Groups		5,7				6,7
Lead / Lag	Lead	-	Lead	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.21	0.00	0.18	0.30	0.26	0.01
Intersection LOS	C					
Intersection V/C	0.750					

Intersection Level Of Service Report
Intersection 25: Maple Avenue at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.715

Intersection Setup

Name	Maple Avenue			Maple Avenue			Sepulveda Boulevard			Sepulveda Boulevard		
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 Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Maple Avenue			Maple Avenue			Sepulveda Boulevard			Sepulveda Boulevard		
Base Volume Input [veh/h]	188	287	82	94	313	98	174	1491	269	95	1236	93
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 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
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
Total Hourly Volume [veh/h]	188	287	82	94	313	98	174	1491	269	95	1236	93
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]	47	72	21	24	78	25	44	373	67	24	309	23
Total Analysis Volume [veh/h]	188	287	82	94	313	98	174	1491	269	95	1236	93
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.12	0.12	0.12	0.06	0.10	0.06	0.06	0.37	0.37	0.03	0.21	0.21
Intersection LOS	C											
Intersection V/C	0.715											

Intersection Level Of Service Report
Intersection 26: Crenshaw Boulevard at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.946

Intersection Setup

Name	Crenshaw Boulevard			Crenshaw Boulevard			Sepulveda Boulevard			Sepulveda Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Crenshaw Boulevard			Crenshaw Boulevard			Sepulveda Boulevard			Sepulveda Boulevard		
Base Volume Input [veh/h]	416	933	199	168	1279	195	198	1276	510	336	1076	153
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 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
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
Total Hourly Volume [veh/h]	416	933	199	168	1279	195	198	1276	510	336	1076	153
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	233	50	42	320	49	50	319	128	84	269	38
Total Analysis Volume [veh/h]	416	933	199	168	1279	195	198	1276	510	336	1076	153
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.14	0.15	0.01	0.06	0.27	0.12	0.07	0.27	0.32	0.12	0.17	0.10
Intersection LOS	E											
Intersection V/C	0.946											

Intersection Level Of Service Report
Intersection 27: Western Avenue at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.902

Intersection Setup

Name	Western Avenue			Western Avenue			Carson Street			Carson 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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Western Avenue			Western Avenue			Carson Street			Carson Street		
Base Volume Input [veh/h]	126	794	160	208	1047	179	58	1014	126	63	842	103
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 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
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
Total Hourly Volume [veh/h]	126	794	160	208	1047	179	58	1014	126	63	842	103
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]	32	199	40	52	262	45	15	254	32	16	211	26
Total Analysis Volume [veh/h]	126	794	160	208	1047	179	58	1014	126	63	842	103
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.25	0.10	0.13	0.33	0.11	0.04	0.36	0.36	0.04	0.30	0.30
Intersection LOS	E											
Intersection V/C	0.902											

APPENDIX B-II

EXISTING WITH AMBIENT GROWTH (YEAR 2028) TRAFFIC CONDITIONS

Intersection Level Of Service Report
Intersection 1: I-405 NB On-Ramp at Redondo Beach Boulevard

Control Type:	Two-way stop	Delay (sec / veh):	13.3
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.207

Intersection Setup

Name	I-405 NB On-Ramp		Redondo Beach Boulevard		Redondo Beach Boulevard	
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 Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	I-405 NB On-Ramp		Redondo Beach Boulevard		Redondo Beach Boulevard	
Base Volume Input [veh/h]	0	0	113	902	636	629
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	0	0	113	902	636	629
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]	0	0	28	226	159	157
Total Analysis Volume [veh/h]	0	0	113	902	636	629
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			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.21	0.01	0.01	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	13.32	0.00	0.00	0.00
Movement LOS			B	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.77	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	19.33	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		1.48		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.66					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 2: Prairie Avenue at Redondo Beach Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.934

Intersection Setup

Name	Prairie Avenue			Prairie Avenue			Redondo Beach Boulevard			Redondo Beach Boulevard		
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 Entry Pocket	1	0	1	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Prairie Avenue			Prairie Avenue			Redondo Beach Boulevard			Redondo Beach Boulevard		
Base Volume Input [veh/h]	313	533	183	131	896	199	111	521	226	213	722	156
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 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
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
Total Hourly Volume [veh/h]	313	533	183	131	896	199	111	521	226	213	722	156
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]	78	133	46	33	224	50	28	130	57	53	181	39
Total Analysis Volume [veh/h]	313	533	183	131	896	199	111	521	226	213	722	156
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.20	0.17	0.11	0.08	0.34	0.34	0.07	0.16	0.14	0.13	0.23	0.10
Intersection LOS	E											
Intersection V/C	0.934											

Intersection Level Of Service Report
Intersection 3: Prairie Avenue at Artesia Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.792

Intersection Setup

Name	Prairie Avenue			Prairie Avenue			Artesia Boulevard			Artesia Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Prairie Avenue			Prairie Avenue			Artesia Boulevard			Artesia Boulevard		
Base Volume Input [veh/h]	69	861	489	251	1053	34	29	869	65	361	926	113
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 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
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
Total Hourly Volume [veh/h]	69	861	489	251	1053	34	29	869	65	361	926	113
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]	17	215	122	63	263	9	7	217	16	90	232	28
Total Analysis Volume [veh/h]	69	861	489	251	1053	34	29	869	65	361	926	113
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.18	0.18	0.16	0.33	0.02	0.02	0.19	0.19	0.13	0.29	0.07
Intersection LOS	C											
Intersection V/C	0.792											

Intersection Level Of Service Report
Intersection 4: Prairie Avenue at W 182nd Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.782

Intersection Setup

Name	Prairie Avenue			Prairie Avenue			W 182nd Street			W 182nd 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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Prairie Avenue			Prairie Avenue			W 182nd Street			W 182nd Street		
Base Volume Input [veh/h]	74	935	143	132	1111	105	203	285	53	285	363	154
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 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
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
Total Hourly Volume [veh/h]	74	935	143	132	1111	105	203	285	53	285	363	154
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]	19	234	36	33	278	26	51	71	13	71	91	39
Total Analysis Volume [veh/h]	74	935	143	132	1111	105	203	285	53	285	363	154
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	ProtPer	Permiss	Overlap	ProtPer	Permiss	Overlap	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	1	6	6	5	2	2	3	8	0	7	4	0
Auxiliary Signal Groups			6,7			2,3						
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.29	0.09	0.08	0.35	0.07	0.13	0.11	0.11	0.18	0.16	0.16
Intersection LOS	C											
Intersection V/C	0.782											

Intersection Level Of Service Report
Intersection 5: Prairie Avenue at W 190th Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.746

Intersection Setup

Name	Prairie Avenue			Prairie Avenue			W 190th Street			W 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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Prairie Avenue			Prairie Avenue			W 190th Street			W 190th Street		
Base Volume Input [veh/h]	61	844	489	68	1162	182	120	721	82	571	911	78
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 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
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
Total Hourly Volume [veh/h]	61	844	489	68	1162	182	120	721	82	571	911	78
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]	15	211	122	17	291	46	30	180	21	143	228	20
Total Analysis Volume [veh/h]	61	844	489	68	1162	182	120	721	82	571	911	78
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.18	0.11	0.04	0.24	0.11	0.08	0.17	0.17	0.20	0.21	0.21
Intersection LOS	C											
Intersection V/C	0.746											

Intersection Level Of Service Report
Intersection 6: Madrona Avenue at Del Amo Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.735

Intersection Setup

Name	Madrona Avenue			Madrona Avenue			Del Amo Boulevard			Del Amo Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Madrona Avenue			Madrona Avenue			Del Amo Boulevard			Del Amo Boulevard		
Base Volume Input [veh/h]	133	946	144	138	1204	329	336	487	105	149	709	112
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 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
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
Total Hourly Volume [veh/h]	133	946	144	138	1204	329	336	487	105	149	709	112
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]	33	237	36	35	301	82	84	122	26	37	177	28
Total Analysis Volume [veh/h]	133	946	144	138	1204	329	336	487	105	149	709	112
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.20	0.09	0.05	0.25	0.21	0.12	0.15	0.07	0.05	0.22	0.07
Intersection LOS	C											
Intersection V/C	0.735											

Intersection Level Of Service Report
Intersection 7: Anza Avenue at Torrance Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.751

Intersection Setup

Name	Anza Avenue			Anza Avenue			Torrance Boulevard			Torrance Boulevard		
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 Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Anza Avenue			Anza Avenue			Torrance Boulevard			Torrance Boulevard		
Base Volume Input [veh/h]	208	720	134	137	739	119	104	774	223	110	706	114
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 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
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
Total Hourly Volume [veh/h]	208	720	134	137	739	119	104	774	223	110	706	114
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]	52	180	34	34	185	30	26	194	56	28	177	29
Total Analysis Volume [veh/h]	208	720	134	137	739	119	104	774	223	110	706	114
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.27	0.27	0.05	0.27	0.27	0.07	0.24	0.14	0.07	0.22	0.07
Intersection LOS	C											
Intersection V/C	0.751											

Intersection Level Of Service Report
Intersection 8: Hawthorne Boulevard at Torrance Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.690

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Torrance Boulevard			Torrance Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Torrance Boulevard			Torrance Boulevard		
Base Volume Input [veh/h]	220	1116	146	145	1476	214	240	761	141	333	960	150
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 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
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
Total Hourly Volume [veh/h]	220	1116	146	145	1476	214	240	761	141	333	960	150
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]	55	279	37	36	369	54	60	190	35	83	240	38
Total Analysis Volume [veh/h]	220	1116	146	145	1476	214	240	761	141	333	960	150
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.17	0.09	0.05	0.23	0.13	0.08	0.16	0.09	0.12	0.20	0.09
Intersection LOS	B											
Intersection V/C	0.690											

Intersection Level Of Service Report
Intersection 9: Madrona Avenue at Torrance Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.712

Intersection Setup

Name	Madrona Avenue			Madrona Avenue			Torrance Boulevard			Torrance Boulevard		
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 Entry Pocket	1	0	0	1	0	1	1	0	1	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Madrona Avenue			Madrona Avenue			Torrance Boulevard			Torrance Boulevard		
Base Volume Input [veh/h]	171	908	92	109	1103	335	258	578	100	148	1016	102
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 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
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
Total Hourly Volume [veh/h]	171	908	92	109	1103	335	258	578	100	148	1016	102
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]	43	227	23	27	276	84	65	145	25	37	254	26
Total Analysis Volume [veh/h]	171	908	92	109	1103	335	258	578	100	148	1016	102
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.21	0.21	0.04	0.23	0.21	0.09	0.18	0.06	0.05	0.23	0.23
Intersection LOS	C											
Intersection V/C	0.712											

Intersection Level Of Service Report
Intersection 10: Maple Avenue at Torrance Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.674

Intersection Setup

Name	Maple Avenue			Maple Avenue			Torrance Boulevard			Torrance Boulevard		
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 Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Maple Avenue			Maple Avenue			Torrance Boulevard			Torrance Boulevard		
Base Volume Input [veh/h]	52	188	32	20	95	70	72	676	43	38	1126	88
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 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
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
Total Hourly Volume [veh/h]	52	188	32	20	95	70	72	676	43	38	1126	88
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	47	8	5	24	18	18	169	11	10	282	22
Total Analysis Volume [veh/h]	52	188	32	20	95	70	72	676	43	38	1126	88
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.14	0.14	0.01	0.06	0.04	0.05	0.22	0.22	0.02	0.38	0.38
Intersection LOS	B											
Intersection V/C	0.674											

Intersection Level Of Service Report
Intersection 11: Crenshaw Boulevard at Torrance Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.680

Intersection Setup

Name	Crenshaw Boulevard			Crenshaw Boulevard			Torrance Boulevard			Torrance Boulevard		
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 Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Crenshaw Boulevard			Crenshaw Boulevard			Torrance Boulevard			Torrance Boulevard		
Base Volume Input [veh/h]	142	1197	169	75	1116	81	131	600	94	209	1076	118
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 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
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
Total Hourly Volume [veh/h]	142	1197	169	75	1116	81	131	600	94	209	1076	118
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]	36	299	42	19	279	20	33	150	24	52	269	30
Total Analysis Volume [veh/h]	142	1197	169	75	1116	81	131	600	94	209	1076	118
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.28	0.28	0.03	0.25	0.25	0.05	0.19	0.06	0.07	0.22	0.07
Intersection LOS	B											
Intersection V/C	0.680											

Intersection Level Of Service Report
Intersection 12: Hawthorne Boulevard at Fashion Way

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.461

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Fashion Way			Fashion Way		
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 Entry Pocket	1	0	1	1	0	1	0	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Fashion Way			Fashion Way		
Base Volume Input [veh/h]	64	1359	87	70	1828	74	41	0	42	53	26	60
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 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
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
Total Hourly Volume [veh/h]	64	1359	87	70	1828	74	41	0	42	53	26	60
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]	16	340	22	18	457	19	10	0	11	13	7	15
Total Analysis Volume [veh/h]	64	1359	87	70	1828	74	41	0	42	53	26	60
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Permiss	Overlap	Split	Split	Overlap
Signal Group	1	6	0	5	2	0	3	0	3	0	4	4
Auxiliary Signal Groups									1,3			4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.21	0.05	0.02	0.29	0.05	0.03	0.00	0.00	0.02	0.03	0.01
Intersection LOS	A											
Intersection V/C	0.461											

Intersection Level Of Service Report
Intersection 13: Madrona Avenue at Fashion Way

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.384

Intersection Setup

Name	Madrona Avenue		Madrona Avenue			Fashion Way	
Approach	Northbound		Southbound			Eastbound	
Lane Configuration							
Turning Movement	Left	Thru	U-turn	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	0	1	1	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00			30.00	
Grade [%]	0.00		0.00			0.00	
Crosswalk	Yes		No			Yes	

Volumes

Name	Madrona Avenue		Madrona Avenue			Fashion Way	
Base Volume Input [veh/h]	96	1150	2	1114	160	49	29
Base Volume Adjustment Factor	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
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	96	1150	2	1114	160	49	29
Peak Hour Factor	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
Total 15-Minute Volume [veh/h]	24	288	1	279	40	12	7
Total Analysis Volume [veh/h]	96	1150	2	1114	160	49	29
Pedestrian Volume [ped/h]	0		0			0	
Bicycle Volume [bicycles/h]	0		0			0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protected	Permissive	Protected	Permissive	Overlap	Permissive	Permissive
Signal Group	1	6	5	2	2	3	0
Auxiliary Signal Groups					2,3		
Lead / Lag	Lead	-	Lead	-	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.24	0.00	0.23	0.08	0.02	0.02
Intersection LOS	A						
Intersection V/C	0.384						

Intersection Level Of Service Report
Intersection 14: Anza Avenue at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.745

Intersection Setup

Name	Anza Avenue			Anza Avenue			Carson Street			Carson 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 Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Anza Avenue			Anza Avenue			Carson Street			Carson Street		
Base Volume Input [veh/h]	29	799	250	152	811	29	28	211	51	167	196	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 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
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
Total Hourly Volume [veh/h]	29	799	250	152	811	29	28	211	51	167	196	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]	7	200	63	38	203	7	7	53	13	42	49	50
Total Analysis Volume [veh/h]	29	799	250	152	811	29	28	211	51	167	196	198
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.33	0.33	0.10	0.26	0.26	0.02	0.16	0.16	0.06	0.12	0.12
Intersection LOS	C											
Intersection V/C	0.745											

Intersection Level Of Service Report
Intersection 15: Hawthorne Boulevard at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.706

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Carson Street			Carson 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 Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Carson Street			Carson Street		
Base Volume Input [veh/h]	113	1355	144	126	1651	68	65	465	70	287	545	147
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 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
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
Total Hourly Volume [veh/h]	113	1355	144	126	1651	68	65	465	70	287	545	147
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]	28	339	36	32	413	17	16	116	18	72	136	37
Total Analysis Volume [veh/h]	113	1355	144	126	1651	68	65	465	70	287	545	147
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.21	0.09	0.04	0.27	0.27	0.04	0.17	0.17	0.10	0.11	0.09
Intersection LOS	C											
Intersection V/C	0.706											

Intersection Level Of Service Report
Intersection 16: Del Amo Circle E at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.358

Intersection Setup

Name	Del Amo Circle E			Del Amo Circle E			Carson Street			Carson 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 Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Del Amo Circle E			Del Amo Circle E			Carson Street			Carson Street		
Base Volume Input [veh/h]	45	20	27	5	13	12	17	655	49	48	1017	42
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 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
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
Total Hourly Volume [veh/h]	45	20	27	5	13	12	17	655	49	48	1017	42
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]	11	5	7	1	3	3	4	164	12	12	254	11
Total Analysis Volume [veh/h]	45	20	27	5	13	12	17	655	49	48	1017	42
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	4	0	0	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.01	0.01	0.00	0.01	0.01	0.01	0.14	0.03	0.03	0.21	0.03
Intersection LOS	A											
Intersection V/C	0.358											

Intersection Level Of Service Report
Intersection 17: Madrona Avenue at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.591

Intersection Setup

Name	Madrona Avenue			Madrona Avenue			Carson Street			Carson 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 Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Madrona Avenue			Madrona Avenue			Carson Street			Carson Street		
Base Volume Input [veh/h]	80	857	105	158	778	174	119	550	32	45	861	176
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 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
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
Total Hourly Volume [veh/h]	80	857	105	158	778	174	119	550	32	45	861	176
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]	20	214	26	40	195	44	30	138	8	11	215	44
Total Analysis Volume [veh/h]	80	857	105	158	778	174	119	550	32	45	861	176
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.18	0.07	0.05	0.16	0.11	0.04	0.11	0.02	0.03	0.22	0.22
Intersection LOS	A											
Intersection V/C	0.591											

Intersection Level Of Service Report
Intersection 18: Maple Avenue at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.709

Intersection Setup

Name	Maple Avenue			Maple Avenue			Carson Street			Carson 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 Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Maple Avenue			Maple Avenue			Carson Street			Carson Street		
Base Volume Input [veh/h]	105	298	154	36	211	23	18	743	70	93	936	69
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 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
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
Total Hourly Volume [veh/h]	105	298	154	36	211	23	18	743	70	93	936	69
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]	26	75	39	9	53	6	5	186	18	23	234	17
Total Analysis Volume [veh/h]	105	298	154	36	211	23	18	743	70	93	936	69
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	4	0	0	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.28	0.28	0.02	0.15	0.15	0.01	0.23	0.04	0.06	0.29	0.04
Intersection LOS	C											
Intersection V/C	0.709											

Intersection Level Of Service Report
Intersection 19: Crenshaw Boulevard at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.786

Intersection Setup

Name	Crenshaw Boulevard			Crenshaw Boulevard			Carson Street			Carson 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 Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Crenshaw Boulevard			Crenshaw Boulevard			Carson Street			Carson Street		
Base Volume Input [veh/h]	98	1109	199	162	1109	103	202	660	59	299	1050	205
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 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
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
Total Hourly Volume [veh/h]	98	1109	199	162	1109	103	202	660	59	299	1050	205
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]	25	277	50	41	277	26	51	165	15	75	263	51
Total Analysis Volume [veh/h]	98	1109	199	162	1109	103	202	660	59	299	1050	205
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

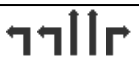
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.23	0.12	0.06	0.25	0.25	0.07	0.15	0.15	0.10	0.33	0.13
Intersection LOS	C											
Intersection V/C	0.786											

Intersection Level Of Service Report
Intersection 20: Anza Avenue at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.715

Intersection Setup

Name	Anza Avenue			Anza Avenue			Sepulveda Boulevard			Sepulveda Boulevard		
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 Entry Pocket	1	0	1	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Anza Avenue			Anza Avenue			Sepulveda Boulevard			Sepulveda Boulevard		
Base Volume Input [veh/h]	104	595	179	160	778	69	172	630	271	255	699	242
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 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
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
Total Hourly Volume [veh/h]	104	595	179	160	778	69	172	630	271	255	699	242
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]	26	149	45	40	195	17	43	158	68	64	175	61
Total Analysis Volume [veh/h]	104	595	179	160	778	69	172	630	271	255	699	242
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.19	0.11	0.10	0.26	0.26	0.06	0.20	0.17	0.09	0.22	0.15
Intersection LOS	C											
Intersection V/C	0.715											

Intersection Level Of Service Report
Intersection 21: Hawthorne Boulevard at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.800

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Sepulveda Boulevard			Sepulveda Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Sepulveda Boulevard			Sepulveda Boulevard		
Base Volume Input [veh/h]	123	1336	400	115	1732	202	229	817	79	575	1080	201
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 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
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
Total Hourly Volume [veh/h]	123	1336	400	115	1732	202	229	817	79	575	1080	201
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]	31	334	100	29	433	51	57	204	20	144	270	50
Total Analysis Volume [veh/h]	123	1336	400	115	1732	202	229	817	79	575	1080	201
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Unsigna	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.21	0.00	0.04	0.27	0.13	0.08	0.19	0.19	0.20	0.23	0.13
Intersection LOS	C											
Intersection V/C	0.800											

Intersection Level Of Service Report
Intersection 22: Madison Street at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.575

Intersection Setup

Name	Madison Street		Sepulveda Boulevard		Sepulveda Boulevard	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Madison Street		Sepulveda Boulevard		Sepulveda Boulevard	
Base Volume Input [veh/h]	27	103	1293	22	121	1889
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	27	103	1293	22	121	1889
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]	7	26	323	6	30	472
Total Analysis Volume [veh/h]	27	103	1293	22	121	1889
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.08	0.21	0.21	0.08	0.39
Intersection LOS	A					
Intersection V/C	0.575					

Intersection Level Of Service Report
Intersection 23: Del Amo Circle E at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.624

Intersection Setup

Name	Del Amo Circle E		Sepulveda Boulevard		Sepulveda Boulevard	
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 Entry Pocket	1	1	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		No	

Volumes

Name	Del Amo Circle E		Sepulveda Boulevard		Sepulveda Boulevard	
Base Volume Input [veh/h]	25	121	85	1305	1895	37
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	25	121	85	1305	1895	37
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]	6	30	21	326	474	9
Total Analysis Volume [veh/h]	25	121	85	1305	1895	37
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Overlap
Signal Group	7	0	5	2	6	6
Auxiliary Signal Groups						6,7
Lead / Lag	Lead	-	Lead	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.08	0.05	0.27	0.39	0.01
Intersection LOS	B					
Intersection V/C	0.624					

Intersection Level Of Service Report
Intersection 24: Madrona Avenue at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.688

Intersection Setup

Name	Madrona Avenue		Sepulveda Boulevard		Sepulveda Boulevard	
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 Entry Pocket	1	1	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		No	

Volumes

Name	Madrona Avenue		Sepulveda Boulevard		Sepulveda Boulevard	
Base Volume Input [veh/h]	358	369	386	924	1584	387
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	358	369	386	924	1584	387
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]	90	92	97	231	396	97
Total Analysis Volume [veh/h]	358	369	386	924	1584	387
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permissive	Overlap	Protected	Permissive	Permissive	Overlap
Signal Group	7	7	5	2	6	6
Auxiliary Signal Groups		5,7				6,7
Lead / Lag	Lead	-	Lead	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.12	0.00	0.13	0.19	0.33	0.12
Intersection LOS	B					
Intersection V/C	0.688					

Intersection Level Of Service Report
Intersection 25: Maple Avenue at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.640

Intersection Setup

Name	Maple Avenue			Maple Avenue			Sepulveda Boulevard			Sepulveda Boulevard		
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 Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Maple Avenue			Maple Avenue			Sepulveda Boulevard			Sepulveda Boulevard		
Base Volume Input [veh/h]	195	397	80	119	355	185	95	989	153	86	1556	169
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 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
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
Total Hourly Volume [veh/h]	195	397	80	119	355	185	95	989	153	86	1556	169
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]	49	99	20	30	89	46	24	247	38	22	389	42
Total Analysis Volume [veh/h]	195	397	80	119	355	185	95	989	153	86	1556	169
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.12	0.15	0.15	0.07	0.11	0.12	0.03	0.24	0.24	0.03	0.27	0.27
Intersection LOS	B											
Intersection V/C	0.640											

Intersection Level Of Service Report
Intersection 26: Crenshaw Boulevard at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.706

Intersection Setup

Name	Crenshaw Boulevard			Crenshaw Boulevard			Sepulveda Boulevard			Sepulveda Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Crenshaw Boulevard			Crenshaw Boulevard			Sepulveda Boulevard			Sepulveda Boulevard		
Base Volume Input [veh/h]	473	1426	248	201	838	149	239	961	232	194	1106	151
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 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
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
Total Hourly Volume [veh/h]	473	1426	248	201	838	149	239	961	232	194	1106	151
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]	118	357	62	50	210	37	60	240	58	49	277	38
Total Analysis Volume [veh/h]	473	1426	248	201	838	149	239	961	232	194	1106	151
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.16	0.22	0.09	0.07	0.17	0.09	0.08	0.20	0.15	0.07	0.17	0.09
Intersection LOS	C											
Intersection V/C	0.706											

Intersection Level Of Service Report
Intersection 27: Western Avenue at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.900

Intersection Setup

Name	Western Avenue			Western Avenue			Carson Street			Carson 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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Western Avenue			Western Avenue			Carson Street			Carson Street		
Base Volume Input [veh/h]	159	1065	115	68	757	144	55	617	112	102	1123	126
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 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
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
Total Hourly Volume [veh/h]	159	1065	115	68	757	144	55	617	112	102	1123	126
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]	40	266	29	17	189	36	14	154	28	26	281	32
Total Analysis Volume [veh/h]	159	1065	115	68	757	144	55	617	112	102	1123	126
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.33	0.07	0.04	0.24	0.09	0.03	0.23	0.23	0.06	0.39	0.39
Intersection LOS	D											
Intersection V/C	0.900											

Intersection Level Of Service Report
Intersection 1: I-405 NB On-Ramp at Redondo Beach Boulevard

Control Type:	Two-way stop	Delay (sec / veh):	18.8
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.533

Intersection Setup

Name	I-405 NB On-Ramp		Redondo Beach Boulevard		Redondo Beach Boulevard	
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 Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	I-405 NB On-Ramp		Redondo Beach Boulevard		Redondo Beach Boulevard	
Base Volume Input [veh/h]	0	0	293	1363	658	598
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	0	0	293	1363	658	598
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]	0	0	73	341	165	150
Total Analysis Volume [veh/h]	0	0	293	1363	658	598
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			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.53	0.01	0.01	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	18.78	0.00	0.00	0.00
Movement LOS			C	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	3.12	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	78.05	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		3.32		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.89					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 2: Prairie Avenue at Redondo Beach Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.993

Intersection Setup

Name	Prairie Avenue			Prairie Avenue			Redondo Beach Boulevard			Redondo Beach Boulevard		
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 Entry Pocket	1	0	1	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Prairie Avenue			Prairie Avenue			Redondo Beach Boulevard			Redondo Beach Boulevard		
Base Volume Input [veh/h]	332	868	242	156	725	205	154	846	307	209	681	163
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 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
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
Total Hourly Volume [veh/h]	332	868	242	156	725	205	154	846	307	209	681	163
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]	83	217	61	39	181	51	39	212	77	52	170	41
Total Analysis Volume [veh/h]	332	868	242	156	725	205	154	846	307	209	681	163
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.21	0.27	0.15	0.10	0.29	0.29	0.10	0.26	0.19	0.13	0.21	0.10
Intersection LOS	E											
Intersection V/C	0.993											

Intersection Level Of Service Report
Intersection 3: Prairie Avenue at Artesia Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.830

Intersection Setup

Name	Prairie Avenue			Prairie Avenue			Artesia Boulevard			Artesia Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Prairie Avenue			Prairie Avenue			Artesia Boulevard			Artesia Boulevard		
Base Volume Input [veh/h]	69	1149	314	183	1003	57	106	1004	117	404	965	213
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 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
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
Total Hourly Volume [veh/h]	69	1149	314	183	1003	57	106	1004	117	404	965	213
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]	17	287	79	46	251	14	27	251	29	101	241	53
Total Analysis Volume [veh/h]	69	1149	314	183	1003	57	106	1004	117	404	965	213
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.24	0.06	0.11	0.31	0.04	0.07	0.23	0.23	0.14	0.30	0.13
Intersection LOS	D											
Intersection V/C	0.830											

Intersection Level Of Service Report
Intersection 4: Prairie Avenue at W 182nd Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.855

Intersection Setup

Name	Prairie Avenue			Prairie Avenue			W 182nd Street			W 182nd 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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Prairie Avenue			Prairie Avenue			W 182nd Street			W 182nd Street		
Base Volume Input [veh/h]	78	1283	138	98	1226	134	171	356	112	234	363	78
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 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
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
Total Hourly Volume [veh/h]	78	1283	138	98	1226	134	171	356	112	234	363	78
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]	20	321	35	25	307	34	43	89	28	59	91	20
Total Analysis Volume [veh/h]	78	1283	138	98	1226	134	171	356	112	234	363	78
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	ProtPer	Permiss	Overlap	ProtPer	Permiss	Overlap	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	1	6	6	5	2	2	3	8	0	7	4	0
Auxiliary Signal Groups			6,7			2,3						
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.40	0.09	0.06	0.38	0.08	0.11	0.15	0.15	0.15	0.14	0.14
Intersection LOS	D											
Intersection V/C	0.855											

Intersection Level Of Service Report
Intersection 5: Prairie Avenue at W 190th Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.797

Intersection Setup

Name	Prairie Avenue			Prairie Avenue			W 190th Street			W 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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Prairie Avenue			Prairie Avenue			W 190th Street			W 190th Street		
Base Volume Input [veh/h]	119	1211	549	100	1181	215	216	1030	103	404	774	56
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 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
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
Total Hourly Volume [veh/h]	119	1211	549	100	1181	215	216	1030	103	404	774	56
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]	30	303	137	25	295	54	54	258	26	101	194	14
Total Analysis Volume [veh/h]	119	1211	549	100	1181	215	216	1030	103	404	774	56
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.25	0.20	0.06	0.25	0.13	0.14	0.24	0.24	0.14	0.17	0.17
Intersection LOS	C											
Intersection V/C	0.797											

Intersection Level Of Service Report
Intersection 6: Madrona Avenue at Del Amo Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.765

Intersection Setup

Name	Madrona Avenue			Madrona Avenue			Del Amo Boulevard			Del Amo Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Madrona Avenue			Madrona Avenue			Del Amo Boulevard			Del Amo Boulevard		
Base Volume Input [veh/h]	135	1334	185	166	1244	295	349	693	128	166	665	186
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 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
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
Total Hourly Volume [veh/h]	135	1334	185	166	1244	295	349	693	128	166	665	186
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]	34	334	46	42	311	74	87	173	32	42	166	47
Total Analysis Volume [veh/h]	135	1334	185	166	1244	295	349	693	128	166	665	186
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.28	0.12	0.06	0.26	0.18	0.12	0.22	0.08	0.06	0.21	0.12
Intersection LOS	C											
Intersection V/C	0.765											

Intersection Level Of Service Report
Intersection 7: Anza Avenue at Torrance Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.840

Intersection Setup

Name	Anza Avenue			Anza Avenue			Torrance Boulevard			Torrance Boulevard		
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 Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Anza Avenue			Anza Avenue			Torrance Boulevard			Torrance Boulevard		
Base Volume Input [veh/h]	239	919	96	138	813	137	169	772	194	163	814	191
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 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
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
Total Hourly Volume [veh/h]	239	919	96	138	813	137	169	772	194	163	814	191
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]	60	230	24	35	203	34	42	193	49	41	204	48
Total Analysis Volume [veh/h]	239	919	96	138	813	137	169	772	194	163	814	191
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.32	0.32	0.05	0.30	0.30	0.11	0.24	0.12	0.10	0.25	0.12
Intersection LOS	D											
Intersection V/C	0.840											

Intersection Level Of Service Report
Intersection 8: Hawthorne Boulevard at Torrance Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.768

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Torrance Boulevard			Torrance Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Torrance Boulevard			Torrance Boulevard		
Base Volume Input [veh/h]	272	1792	281	199	1534	183	255	951	305	349	821	189
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 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
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
Total Hourly Volume [veh/h]	272	1792	281	199	1534	183	255	951	305	349	821	189
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]	68	448	70	50	384	46	64	238	76	87	205	47
Total Analysis Volume [veh/h]	272	1792	281	199	1534	183	255	951	305	349	821	189
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.09	0.28	0.18	0.07	0.24	0.11	0.09	0.20	0.19	0.12	0.17	0.12
Intersection LOS	C											
Intersection V/C	0.768											

Intersection Level Of Service Report
Intersection 9: Madrona Avenue at Torrance Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.804

Intersection Setup

Name	Madrona Avenue			Madrona Avenue			Torrance Boulevard			Torrance Boulevard		
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 Entry Pocket	1	0	0	1	0	1	1	0	1	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Madrona Avenue			Madrona Avenue			Torrance Boulevard			Torrance Boulevard		
Base Volume Input [veh/h]	154	1092	125	174	1174	253	352	932	226	285	911	107
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 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
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
Total Hourly Volume [veh/h]	154	1092	125	174	1174	253	352	932	226	285	911	107
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]	39	273	31	44	294	63	88	233	57	71	228	27
Total Analysis Volume [veh/h]	154	1092	125	174	1174	253	352	932	226	285	911	107
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.25	0.25	0.06	0.24	0.16	0.12	0.29	0.14	0.10	0.21	0.21
Intersection LOS	D											
Intersection V/C	0.804											

Intersection Level Of Service Report
Intersection 10: Maple Avenue at Torrance Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.677

Intersection Setup

Name	Maple Avenue			Maple Avenue			Torrance Boulevard			Torrance Boulevard		
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 Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Maple Avenue			Maple Avenue			Torrance Boulevard			Torrance Boulevard		
Base Volume Input [veh/h]	46	190	29	74	230	98	68	1124	51	43	1037	38
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 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
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
Total Hourly Volume [veh/h]	46	190	29	74	230	98	68	1124	51	43	1037	38
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]	12	48	7	19	58	25	17	281	13	11	259	10
Total Analysis Volume [veh/h]	46	190	29	74	230	98	68	1124	51	43	1037	38
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.14	0.14	0.05	0.14	0.06	0.04	0.37	0.37	0.03	0.34	0.34
Intersection LOS	B											
Intersection V/C	0.677											

Intersection Level Of Service Report
Intersection 11: Crenshaw Boulevard at Torrance Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.813

Intersection Setup

Name	Crenshaw Boulevard			Crenshaw Boulevard			Torrance Boulevard			Torrance Boulevard		
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 Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Crenshaw Boulevard			Crenshaw Boulevard			Torrance Boulevard			Torrance Boulevard		
Base Volume Input [veh/h]	148	1301	191	175	1280	115	114	911	93	163	877	98
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 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
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
Total Hourly Volume [veh/h]	148	1301	191	175	1280	115	114	911	93	163	877	98
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]	37	325	48	44	320	29	29	228	23	41	219	25
Total Analysis Volume [veh/h]	148	1301	191	175	1280	115	114	911	93	163	877	98
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.31	0.31	0.06	0.29	0.29	0.04	0.28	0.06	0.06	0.18	0.06
Intersection LOS	D											
Intersection V/C	0.813											

Intersection Level Of Service Report
Intersection 12: Hawthorne Boulevard at Fashion Way

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.597

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Fashion Way			Fashion Way		
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 Entry Pocket	1	0	1	1	0	1	0	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Fashion Way			Fashion Way		
Base Volume Input [veh/h]	55	2021	198	188	1982	54	86	0	107	161	17	152
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 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
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
Total Hourly Volume [veh/h]	55	2021	198	188	1982	54	86	0	107	161	17	152
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]	14	505	50	47	496	14	22	0	27	40	4	38
Total Analysis Volume [veh/h]	55	2021	198	188	1982	54	86	0	107	161	17	152
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Permiss	Overlap	Split	Split	Overlap
Signal Group	1	6	0	5	2	0	3	0	3	0	4	4
Auxiliary Signal Groups									1,3			4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.32	0.12	0.07	0.31	0.03	0.05	0.00	0.05	0.06	0.06	0.03
Intersection LOS	A											
Intersection V/C	0.597											

Intersection Level Of Service Report
Intersection 13: Madrona Avenue at Fashion Way

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.551

Intersection Setup

Name	Madrona Avenue		Madrona Avenue			Fashion Way	
Approach	Northbound		Southbound			Eastbound	
Lane Configuration							
Turning Movement	Left	Thru	U-turn	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	0	1	1	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00			30.00	
Grade [%]	0.00		0.00			0.00	
Crosswalk	Yes		No			Yes	

Volumes

Name	Madrona Avenue		Madrona Avenue			Fashion Way	
Base Volume Input [veh/h]	75	1054	15	1340	310	297	234
Base Volume Adjustment Factor	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
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	75	1054	15	1340	310	297	234
Peak Hour Factor	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
Total 15-Minute Volume [veh/h]	19	264	4	335	78	74	59
Total Analysis Volume [veh/h]	75	1054	15	1340	310	297	234
Pedestrian Volume [ped/h]	0		0			0	
Bicycle Volume [bicycles/h]	0		0			0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protected	Permissive	Protected	Permissive	Overlap	Permissive	Permissive
Signal Group	1	6	5	2	2	3	0
Auxiliary Signal Groups					2,3		
Lead / Lag	Lead	-	Lead	-	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.22	0.01	0.28	0.09	0.10	0.15
Intersection LOS	A						
Intersection V/C	0.551						

Intersection Level Of Service Report
Intersection 14: Anza Avenue at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.786

Intersection Setup

Name	Anza Avenue			Anza Avenue			Carson Street			Carson 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 Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Anza Avenue			Anza Avenue			Carson Street			Carson Street		
Base Volume Input [veh/h]	52	1024	179	180	821	44	14	181	30	189	255	184
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 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
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
Total Hourly Volume [veh/h]	52	1024	179	180	821	44	14	181	30	189	255	184
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	256	45	45	205	11	4	45	8	47	64	46
Total Analysis Volume [veh/h]	52	1024	179	180	821	44	14	181	30	189	255	184
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.38	0.38	0.11	0.27	0.27	0.01	0.13	0.13	0.07	0.16	0.12
Intersection LOS	C											
Intersection V/C	0.786											

Intersection Level Of Service Report
Intersection 15: Hawthorne Boulevard at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.834

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Carson Street			Carson 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 Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Carson Street			Carson Street		
Base Volume Input [veh/h]	104	2146	294	318	1859	51	128	541	95	259	444	206
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 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
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
Total Hourly Volume [veh/h]	104	2146	294	318	1859	51	128	541	95	259	444	206
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]	26	537	74	80	465	13	32	135	24	65	111	52
Total Analysis Volume [veh/h]	104	2146	294	318	1859	51	128	541	95	259	444	206
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.34	0.18	0.11	0.30	0.30	0.08	0.20	0.20	0.09	0.09	0.13
Intersection LOS	D											
Intersection V/C	0.834											

Intersection Level Of Service Report
Intersection 16: Del Amo Circle E at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.485

Intersection Setup

Name	Del Amo Circle E			Del Amo Circle E			Carson Street			Carson 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 Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Del Amo Circle E			Del Amo Circle E			Carson Street			Carson Street		
Base Volume Input [veh/h]	77	95	54	104	97	75	80	1044	111	90	881	155
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 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
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
Total Hourly Volume [veh/h]	77	95	54	104	97	75	80	1044	111	90	881	155
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]	19	24	14	26	24	19	20	261	28	23	220	39
Total Analysis Volume [veh/h]	77	95	54	104	97	75	80	1044	111	90	881	155
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	4	0	0	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.05	0.05	0.07	0.05	0.05	0.05	0.22	0.07	0.06	0.18	0.10
Intersection LOS	A											
Intersection V/C	0.485											

Intersection Level Of Service Report
Intersection 17: Madrona Avenue at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.643

Intersection Setup

Name	Madrona Avenue			Madrona Avenue			Carson Street			Carson 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 Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Madrona Avenue			Madrona Avenue			Carson Street			Carson Street		
Base Volume Input [veh/h]	93	818	163	342	935	263	195	943	106	52	755	139
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 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
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
Total Hourly Volume [veh/h]	93	818	163	342	935	263	195	943	106	52	755	139
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]	23	205	41	86	234	66	49	236	27	13	189	35
Total Analysis Volume [veh/h]	93	818	163	342	935	263	195	943	106	52	755	139
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.17	0.10	0.12	0.19	0.16	0.07	0.20	0.07	0.03	0.19	0.19
Intersection LOS	B											
Intersection V/C	0.643											

Intersection Level Of Service Report
Intersection 18: Maple Avenue at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.832

Intersection Setup

Name	Maple Avenue			Maple Avenue			Carson Street			Carson 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 Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Maple Avenue			Maple Avenue			Carson Street			Carson Street		
Base Volume Input [veh/h]	69	221	92	77	258	35	28	1398	92	82	885	43
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 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
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
Total Hourly Volume [veh/h]	69	221	92	77	258	35	28	1398	92	82	885	43
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]	17	55	23	19	65	9	7	350	23	21	221	11
Total Analysis Volume [veh/h]	69	221	92	77	258	35	28	1398	92	82	885	43
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	4	0	0	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.20	0.20	0.05	0.18	0.18	0.02	0.44	0.06	0.05	0.28	0.03
Intersection LOS	D											
Intersection V/C	0.832											

Intersection Level Of Service Report
Intersection 19: Crenshaw Boulevard at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.819

Intersection Setup

Name	Crenshaw Boulevard			Crenshaw Boulevard			Carson Street			Carson 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 Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Crenshaw Boulevard			Crenshaw Boulevard			Carson Street			Carson Street		
Base Volume Input [veh/h]	107	1206	312	320	1205	146	223	1198	75	263	801	153
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 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
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
Total Hourly Volume [veh/h]	107	1206	312	320	1205	146	223	1198	75	263	801	153
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]	27	302	78	80	301	37	56	300	19	66	200	38
Total Analysis Volume [veh/h]	107	1206	312	320	1205	146	223	1198	75	263	801	153
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

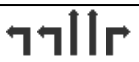
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.25	0.20	0.11	0.28	0.28	0.08	0.27	0.27	0.09	0.25	0.10
Intersection LOS	D											
Intersection V/C	0.819											

Intersection Level Of Service Report
Intersection 20: Anza Avenue at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.804

Intersection Setup

Name	Anza Avenue			Anza Avenue			Sepulveda Boulevard			Sepulveda Boulevard		
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 Entry Pocket	1	0	1	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Anza Avenue			Anza Avenue			Sepulveda Boulevard			Sepulveda Boulevard		
Base Volume Input [veh/h]	180	767	201	182	774	103	176	796	226	198	692	277
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 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
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
Total Hourly Volume [veh/h]	180	767	201	182	774	103	176	796	226	198	692	277
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]	45	192	50	46	194	26	44	199	57	50	173	69
Total Analysis Volume [veh/h]	180	767	201	182	774	103	176	796	226	198	692	277
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.11	0.24	0.13	0.11	0.27	0.27	0.06	0.25	0.14	0.07	0.22	0.17
Intersection LOS	D											
Intersection V/C	0.804											

Intersection Level Of Service Report
Intersection 21: Hawthorne Boulevard at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.904

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Sepulveda Boulevard			Sepulveda Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Sepulveda Boulevard			Sepulveda Boulevard		
Base Volume Input [veh/h]	244	1858	646	292	1754	235	274	962	119	539	814	210
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 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
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
Total Hourly Volume [veh/h]	244	1858	646	292	1754	235	274	962	119	539	814	210
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]	61	465	162	73	439	59	69	241	30	135	204	53
Total Analysis Volume [veh/h]	244	1858	646	292	1754	235	274	962	119	539	814	210
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Unsigna	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.29	0.00	0.10	0.27	0.15	0.10	0.23	0.23	0.19	0.17	0.13
Intersection LOS	E											
Intersection V/C	0.904											

Intersection Level Of Service Report
Intersection 22: Madison Street at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.625

Intersection Setup

Name	Madison Street		Sepulveda Boulevard		Sepulveda Boulevard	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Madison Street		Sepulveda Boulevard		Sepulveda Boulevard	
Base Volume Input [veh/h]	18	214	1890	62	120	1550
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	18	214	1890	62	120	1550
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]	5	54	473	16	30	388
Total Analysis Volume [veh/h]	18	214	1890	62	120	1550
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.15	0.31	0.31	0.08	0.32
Intersection LOS	B					
Intersection V/C	0.625					

Intersection Level Of Service Report
Intersection 23: Del Amo Circle E at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.623

Intersection Setup

Name	Del Amo Circle E		Sepulveda Boulevard		Sepulveda Boulevard	
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 Entry Pocket	1	1	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		No	

Volumes

Name	Del Amo Circle E		Sepulveda Boulevard		Sepulveda Boulevard	
Base Volume Input [veh/h]	155	158	180	1909	1496	93
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	155	158	180	1909	1496	93
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]	39	40	45	477	374	23
Total Analysis Volume [veh/h]	155	158	180	1909	1496	93
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Overlap
Signal Group	7	0	5	2	6	6
Auxiliary Signal Groups						6,7
Lead / Lag	Lead	-	Lead	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.10	0.11	0.40	0.31	0.00
Intersection LOS	B					
Intersection V/C	0.623					

Intersection Level Of Service Report
Intersection 24: Madrona Avenue at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.763

Intersection Setup

Name	Madrona Avenue		Sepulveda Boulevard		Sepulveda Boulevard	
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 Entry Pocket	1	1	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		No	

Volumes

Name	Madrona Avenue		Sepulveda Boulevard		Sepulveda Boulevard	
Base Volume Input [veh/h]	606	293	542	1448	1269	352
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	606	293	542	1448	1269	352
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]	152	73	136	362	317	88
Total Analysis Volume [veh/h]	606	293	542	1448	1269	352
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permissive	Overlap	Protected	Permissive	Permissive	Overlap
Signal Group	7	7	5	2	6	6
Auxiliary Signal Groups		5,7				6,7
Lead / Lag	Lead	-	Lead	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.21	0.00	0.19	0.30	0.26	0.01
Intersection LOS	C					
Intersection V/C	0.763					

Intersection Level Of Service Report
Intersection 25: Maple Avenue at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.728

Intersection Setup

Name	Maple Avenue			Maple Avenue			Sepulveda Boulevard			Sepulveda Boulevard		
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 Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Maple Avenue			Maple Avenue			Sepulveda Boulevard			Sepulveda Boulevard		
Base Volume Input [veh/h]	192	293	84	96	320	100	178	1522	275	97	1262	95
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 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
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
Total Hourly Volume [veh/h]	192	293	84	96	320	100	178	1522	275	97	1262	95
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]	48	73	21	24	80	25	45	381	69	24	316	24
Total Analysis Volume [veh/h]	192	293	84	96	320	100	178	1522	275	97	1262	95
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.12	0.12	0.12	0.06	0.10	0.06	0.06	0.37	0.37	0.03	0.21	0.21
Intersection LOS	C											
Intersection V/C	0.728											

Intersection Level Of Service Report
Intersection 26: Crenshaw Boulevard at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.964

Intersection Setup

Name	Crenshaw Boulevard			Crenshaw Boulevard			Sepulveda Boulevard			Sepulveda Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Crenshaw Boulevard			Crenshaw Boulevard			Sepulveda Boulevard			Sepulveda Boulevard		
Base Volume Input [veh/h]	425	953	203	172	1306	199	202	1303	521	343	1099	156
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 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
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
Total Hourly Volume [veh/h]	425	953	203	172	1306	199	202	1303	521	343	1099	156
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]	106	238	51	43	327	50	51	326	130	86	275	39
Total Analysis Volume [veh/h]	425	953	203	172	1306	199	202	1303	521	343	1099	156
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.15	0.15	0.01	0.06	0.27	0.12	0.07	0.27	0.33	0.12	0.17	0.10
Intersection LOS	E											
Intersection V/C	0.964											

Intersection Level Of Service Report
Intersection 27: Western Avenue at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.918

Intersection Setup

Name	Western Avenue			Western Avenue			Carson Street			Carson 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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Western Avenue			Western Avenue			Carson Street			Carson Street		
Base Volume Input [veh/h]	129	811	163	212	1069	183	59	1035	129	64	860	105
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 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
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
Total Hourly Volume [veh/h]	129	811	163	212	1069	183	59	1035	129	64	860	105
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]	32	203	41	53	267	46	15	259	32	16	215	26
Total Analysis Volume [veh/h]	129	811	163	212	1069	183	59	1035	129	64	860	105
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.25	0.10	0.13	0.33	0.11	0.04	0.36	0.36	0.04	0.30	0.30
Intersection LOS	E											
Intersection V/C	0.918											

APPENDIX B-III

EXISTING WITH AMBIENT GROWTH (YEAR 2028) WITH PROJECT TRAFFIC CONDITIONS

Intersection Level Of Service Report
Intersection 1: I-405 NB On-Ramp at Redondo Beach Boulevard

Control Type:	Two-way stop	Delay (sec / veh):	13.6
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.213

Intersection Setup

Name	I-405 NB On-Ramp		Redondo Beach Boulevard		Redondo Beach Boulevard	
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 Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	I-405 NB On-Ramp		Redondo Beach Boulevard		Redondo Beach Boulevard	
Base Volume Input [veh/h]	0	0	113	911	636	660
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	0	0	113	911	636	660
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]	0	0	28	228	159	165
Total Analysis Volume [veh/h]	0	0	113	911	636	660
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			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.21	0.01	0.01	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	13.61	0.00	0.00	0.00
Movement LOS			B	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.80	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	19.99	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		1.50		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.66					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 2: Prairie Avenue at Redondo Beach Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.953

Intersection Setup

Name	Prairie Avenue			Prairie Avenue			Redondo Beach Boulevard			Redondo Beach Boulevard		
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 Entry Pocket	1	0	1	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Prairie Avenue			Prairie Avenue			Redondo Beach Boulevard			Redondo Beach Boulevard		
Base Volume Input [veh/h]	344	533	183	131	896	199	111	521	235	213	722	156
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 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
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
Total Hourly Volume [veh/h]	344	533	183	131	896	199	111	521	235	213	722	156
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]	86	133	46	33	224	50	28	130	59	53	181	39
Total Analysis Volume [veh/h]	344	533	183	131	896	199	111	521	235	213	722	156
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.22	0.17	0.11	0.08	0.34	0.34	0.07	0.16	0.15	0.13	0.23	0.10
Intersection LOS	E											
Intersection V/C	0.953											

Intersection Level Of Service Report
Intersection 3: Prairie Avenue at Artesia Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.795

Intersection Setup

Name	Prairie Avenue			Prairie Avenue			Artesia Boulevard			Artesia Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Prairie Avenue			Prairie Avenue			Artesia Boulevard			Artesia Boulevard		
Base Volume Input [veh/h]	69	892	489	251	1062	34	29	869	65	361	926	113
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 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
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
Total Hourly Volume [veh/h]	69	892	489	251	1062	34	29	869	65	361	926	113
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]	17	223	122	63	266	9	7	217	16	90	232	28
Total Analysis Volume [veh/h]	69	892	489	251	1062	34	29	869	65	361	926	113
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.19	0.18	0.16	0.33	0.02	0.02	0.19	0.19	0.13	0.29	0.07
Intersection LOS	C											
Intersection V/C	0.795											

Intersection Level Of Service Report
Intersection 4: Prairie Avenue at W 182nd Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.785

Intersection Setup

Name	Prairie Avenue			Prairie Avenue			W 182nd Street			W 182nd 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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Prairie Avenue			Prairie Avenue			W 182nd Street			W 182nd Street		
Base Volume Input [veh/h]	74	966	143	132	1120	105	203	285	53	285	363	154
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 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
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
Total Hourly Volume [veh/h]	74	966	143	132	1120	105	203	285	53	285	363	154
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]	19	242	36	33	280	26	51	71	13	71	91	39
Total Analysis Volume [veh/h]	74	966	143	132	1120	105	203	285	53	285	363	154
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	ProtPer	Permiss	Overlap	ProtPer	Permiss	Overlap	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	1	6	6	5	2	2	3	8	0	7	4	0
Auxiliary Signal Groups			6,7			2,3						
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.30	0.09	0.08	0.35	0.07	0.13	0.11	0.11	0.18	0.16	0.16
Intersection LOS	C											
Intersection V/C	0.785											

Intersection Level Of Service Report
Intersection 5: Prairie Avenue at W 190th Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.748

Intersection Setup

Name	Prairie Avenue			Prairie Avenue			W 190th Street			W 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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Prairie Avenue			Prairie Avenue			W 190th Street			W 190th Street		
Base Volume Input [veh/h]	61	875	489	68	1171	182	120	721	82	571	911	78
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 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
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
Total Hourly Volume [veh/h]	61	875	489	68	1171	182	120	721	82	571	911	78
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]	15	219	122	17	293	46	30	180	21	143	228	20
Total Analysis Volume [veh/h]	61	875	489	68	1171	182	120	721	82	571	911	78
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.18	0.11	0.04	0.24	0.11	0.08	0.17	0.17	0.20	0.21	0.21
Intersection LOS	C											
Intersection V/C	0.748											

Intersection Level Of Service Report
Intersection 6: Madrona Avenue at Del Amo Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.737

Intersection Setup

Name	Madrona Avenue			Madrona Avenue			Del Amo Boulevard			Del Amo Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Madrona Avenue			Madrona Avenue			Del Amo Boulevard			Del Amo Boulevard		
Base Volume Input [veh/h]	133	977	144	138	1213	329	336	487	105	149	709	112
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 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
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
Total Hourly Volume [veh/h]	133	977	144	138	1213	329	336	487	105	149	709	112
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]	33	244	36	35	303	82	84	122	26	37	177	28
Total Analysis Volume [veh/h]	133	977	144	138	1213	329	336	487	105	149	709	112
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.20	0.09	0.05	0.25	0.21	0.12	0.15	0.07	0.05	0.22	0.07
Intersection LOS	C											
Intersection V/C	0.737											

Intersection Level Of Service Report
Intersection 7: Anza Avenue at Torrance Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.751

Intersection Setup

Name	Anza Avenue			Anza Avenue			Torrance Boulevard			Torrance Boulevard		
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 Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Anza Avenue			Anza Avenue			Torrance Boulevard			Torrance Boulevard		
Base Volume Input [veh/h]	208	720	134	137	739	119	104	775	223	110	710	114
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 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
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
Total Hourly Volume [veh/h]	208	720	134	137	739	119	104	775	223	110	710	114
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]	52	180	34	34	185	30	26	194	56	28	178	29
Total Analysis Volume [veh/h]	208	720	134	137	739	119	104	775	223	110	710	114
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.27	0.27	0.05	0.27	0.27	0.07	0.24	0.14	0.07	0.22	0.07
Intersection LOS	C											
Intersection V/C	0.751											

Intersection Level Of Service Report
Intersection 8: Hawthorne Boulevard at Torrance Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.692

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Torrance Boulevard			Torrance Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Torrance Boulevard			Torrance Boulevard		
Base Volume Input [veh/h]	224	1124	146	145	1478	214	240	761	142	333	960	150
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 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
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
Total Hourly Volume [veh/h]	224	1124	146	145	1478	214	240	761	142	333	960	150
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]	56	281	37	36	370	54	60	190	36	83	240	38
Total Analysis Volume [veh/h]	224	1124	146	145	1478	214	240	761	142	333	960	150
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

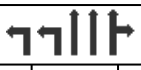
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.18	0.09	0.05	0.23	0.13	0.08	0.16	0.09	0.12	0.20	0.09
Intersection LOS	B											
Intersection V/C	0.692											

Intersection Level Of Service Report
Intersection 9: Madrona Avenue at Torrance Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.714

Intersection Setup

Name	Madrona Avenue			Madrona Avenue			Torrance Boulevard			Torrance Boulevard		
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 Entry Pocket	1	0	0	1	0	1	1	0	1	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Madrona Avenue			Madrona Avenue			Torrance Boulevard			Torrance Boulevard		
Base Volume Input [veh/h]	171	939	96	109	1112	335	258	578	100	149	1016	102
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 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
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
Total Hourly Volume [veh/h]	171	939	96	109	1112	335	258	578	100	149	1016	102
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]	43	235	24	27	278	84	65	145	25	37	254	26
Total Analysis Volume [veh/h]	171	939	96	109	1112	335	258	578	100	149	1016	102
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.22	0.22	0.04	0.23	0.21	0.09	0.18	0.06	0.05	0.23	0.23
Intersection LOS	C											
Intersection V/C	0.714											

Intersection Level Of Service Report
Intersection 10: Maple Avenue at Torrance Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.675

Intersection Setup

Name	Maple Avenue			Maple Avenue			Torrance Boulevard			Torrance Boulevard		
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 Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Maple Avenue			Maple Avenue			Torrance Boulevard			Torrance Boulevard		
Base Volume Input [veh/h]	52	188	32	20	95	70	72	680	43	38	1127	88
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 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
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
Total Hourly Volume [veh/h]	52	188	32	20	95	70	72	680	43	38	1127	88
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	47	8	5	24	18	18	170	11	10	282	22
Total Analysis Volume [veh/h]	52	188	32	20	95	70	72	680	43	38	1127	88
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.14	0.14	0.01	0.06	0.04	0.05	0.23	0.23	0.02	0.38	0.38
Intersection LOS	B											
Intersection V/C	0.675											

Intersection Level Of Service Report
Intersection 11: Crenshaw Boulevard at Torrance Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.680

Intersection Setup

Name	Crenshaw Boulevard			Crenshaw Boulevard			Torrance Boulevard			Torrance Boulevard		
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 Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Crenshaw Boulevard			Crenshaw Boulevard			Torrance Boulevard			Torrance Boulevard		
Base Volume Input [veh/h]	142	1197	169	75	1116	81	131	604	94	209	1077	118
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 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
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
Total Hourly Volume [veh/h]	142	1197	169	75	1116	81	131	604	94	209	1077	118
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]	36	299	42	19	279	20	33	151	24	52	269	30
Total Analysis Volume [veh/h]	142	1197	169	75	1116	81	131	604	94	209	1077	118
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.28	0.28	0.03	0.25	0.25	0.05	0.19	0.06	0.07	0.22	0.07
Intersection LOS	B											
Intersection V/C	0.680											

Intersection Level Of Service Report
Intersection 12: Hawthorne Boulevard at Fashion Way

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.461

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Fashion Way			Fashion Way		
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 Entry Pocket	1	0	1	1	0	1	0	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Fashion Way			Fashion Way		
Base Volume Input [veh/h]	64	1359	87	73	1828	74	41	0	42	53	26	72
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 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
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
Total Hourly Volume [veh/h]	64	1359	87	73	1828	74	41	0	42	53	26	72
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]	16	340	22	18	457	19	10	0	11	13	7	18
Total Analysis Volume [veh/h]	64	1359	87	73	1828	74	41	0	42	53	26	72
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Permiss	Overlap	Split	Split	Overlap
Signal Group	1	6	0	5	2	0	3	0	3	0	4	4
Auxiliary Signal Groups									1,3			4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.21	0.05	0.03	0.29	0.05	0.03	0.00	0.00	0.02	0.03	0.02
Intersection LOS	A											
Intersection V/C	0.461											

Intersection Level Of Service Report
Intersection 13: Madrona Avenue at Fashion Way

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.392

Intersection Setup

Name	Madrona Avenue		Madrona Avenue			Fashion Way	
Approach	Northbound		Southbound			Eastbound	
Lane Configuration							
Turning Movement	Left	Thru	U-turn	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	0	1	1	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00			30.00	
Grade [%]	0.00		0.00			0.00	
Crosswalk	Yes		No			Yes	

Volumes

Name	Madrona Avenue		Madrona Avenue			Fashion Way	
Base Volume Input [veh/h]	96	1162	2	1121	163	72	29
Base Volume Adjustment Factor	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
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	96	1162	2	1121	163	72	29
Peak Hour Factor	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
Total 15-Minute Volume [veh/h]	24	291	1	280	41	18	7
Total Analysis Volume [veh/h]	96	1162	2	1121	163	72	29
Pedestrian Volume [ped/h]	0		0			0	
Bicycle Volume [bicycles/h]	0		0			0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protected	Permissive	Protected	Permissive	Overlap	Permissive	Permissive
Signal Group	1	6	5	2	2	3	0
Auxiliary Signal Groups					2,3		
Lead / Lag	Lead	-	Lead	-	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.24	0.00	0.23	0.08	0.03	0.02
Intersection LOS	A						
Intersection V/C	0.392						

Intersection Level Of Service Report
Intersection 14: Anza Avenue at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.745

Intersection Setup

Name	Anza Avenue			Anza Avenue			Carson Street			Carson 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 Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Anza Avenue			Anza Avenue			Carson Street			Carson Street		
Base Volume Input [veh/h]	29	799	250	152	811	29	28	212	51	167	200	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 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
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
Total Hourly Volume [veh/h]	29	799	250	152	811	29	28	212	51	167	200	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]	7	200	63	38	203	7	7	53	13	42	50	50
Total Analysis Volume [veh/h]	29	799	250	152	811	29	28	212	51	167	200	198
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.33	0.33	0.10	0.26	0.26	0.02	0.16	0.16	0.06	0.13	0.12
Intersection LOS	C											
Intersection V/C	0.745											

Intersection Level Of Service Report
Intersection 15: Hawthorne Boulevard at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.706

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Carson Street			Carson 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 Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Carson Street			Carson Street		
Base Volume Input [veh/h]	113	1355	144	126	1651	68	65	466	70	287	549	147
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 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
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
Total Hourly Volume [veh/h]	113	1355	144	126	1651	68	65	466	70	287	549	147
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]	28	339	36	32	413	17	16	117	18	72	137	37
Total Analysis Volume [veh/h]	113	1355	144	126	1651	68	65	466	70	287	549	147
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.21	0.09	0.04	0.27	0.27	0.04	0.17	0.17	0.10	0.11	0.09
Intersection LOS	C											
Intersection V/C	0.706											

Intersection Level Of Service Report
Intersection 16: Del Amo Circle E at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.359

Intersection Setup

Name	Del Amo Circle E			Del Amo Circle E			Carson Street			Carson 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 Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Del Amo Circle E			Del Amo Circle E			Carson Street			Carson Street		
Base Volume Input [veh/h]	45	20	27	5	13	12	17	656	49	48	1021	42
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 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
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
Total Hourly Volume [veh/h]	45	20	27	5	13	12	17	656	49	48	1021	42
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]	11	5	7	1	3	3	4	164	12	12	255	11
Total Analysis Volume [veh/h]	45	20	27	5	13	12	17	656	49	48	1021	42
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	4	0	0	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.01	0.01	0.00	0.01	0.01	0.01	0.14	0.03	0.03	0.21	0.03
Intersection LOS	A											
Intersection V/C	0.359											

Intersection Level Of Service Report
Intersection 17: Madrona Avenue at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.597

Intersection Setup

Name	Madrona Avenue			Madrona Avenue			Carson Street			Carson 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 Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Madrona Avenue			Madrona Avenue			Carson Street			Carson Street		
Base Volume Input [veh/h]	80	861	105	170	793	178	120	550	32	45	861	179
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 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
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
Total Hourly Volume [veh/h]	80	861	105	170	793	178	120	550	32	45	861	179
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]	20	215	26	43	198	45	30	138	8	11	215	45
Total Analysis Volume [veh/h]	80	861	105	170	793	178	120	550	32	45	861	179
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.18	0.07	0.06	0.17	0.11	0.04	0.11	0.02	0.03	0.22	0.22
Intersection LOS	A											
Intersection V/C	0.597											

Intersection Level Of Service Report
Intersection 18: Maple Avenue at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.710

Intersection Setup

Name	Maple Avenue			Maple Avenue			Carson Street			Carson 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 Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Maple Avenue			Maple Avenue			Carson Street			Carson Street		
Base Volume Input [veh/h]	105	298	154	36	211	23	18	755	70	93	939	69
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 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
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
Total Hourly Volume [veh/h]	105	298	154	36	211	23	18	755	70	93	939	69
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]	26	75	39	9	53	6	5	189	18	23	235	17
Total Analysis Volume [veh/h]	105	298	154	36	211	23	18	755	70	93	939	69
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	4	0	0	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.28	0.28	0.02	0.15	0.15	0.01	0.24	0.04	0.06	0.29	0.04
Intersection LOS	C											
Intersection V/C	0.710											

Intersection Level Of Service Report
Intersection 19: Crenshaw Boulevard at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.786

Intersection Setup

Name	Crenshaw Boulevard			Crenshaw Boulevard			Carson Street			Carson 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 Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Crenshaw Boulevard			Crenshaw Boulevard			Carson Street			Carson Street		
Base Volume Input [veh/h]	98	1109	199	162	1109	103	202	672	59	299	1053	205
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 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
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
Total Hourly Volume [veh/h]	98	1109	199	162	1109	103	202	672	59	299	1053	205
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]	25	277	50	41	277	26	51	168	15	75	263	51
Total Analysis Volume [veh/h]	98	1109	199	162	1109	103	202	672	59	299	1053	205
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.23	0.12	0.06	0.25	0.25	0.07	0.15	0.15	0.10	0.33	0.13
Intersection LOS	C											
Intersection V/C	0.786											

Intersection Level Of Service Report
Intersection 20: Anza Avenue at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.715

Intersection Setup

Name	Anza Avenue			Anza Avenue			Sepulveda Boulevard			Sepulveda Boulevard		
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 Entry Pocket	1	0	1	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Anza Avenue			Anza Avenue			Sepulveda Boulevard			Sepulveda Boulevard		
Base Volume Input [veh/h]	104	595	179	160	778	69	172	631	271	255	703	242
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 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
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
Total Hourly Volume [veh/h]	104	595	179	160	778	69	172	631	271	255	703	242
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]	26	149	45	40	195	17	43	158	68	64	176	61
Total Analysis Volume [veh/h]	104	595	179	160	778	69	172	631	271	255	703	242
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.19	0.11	0.10	0.26	0.26	0.06	0.20	0.17	0.09	0.22	0.15
Intersection LOS	C											
Intersection V/C	0.715											

Intersection Level Of Service Report
Intersection 21: Hawthorne Boulevard at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.801

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Sepulveda Boulevard			Sepulveda Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Sepulveda Boulevard			Sepulveda Boulevard		
Base Volume Input [veh/h]	123	1336	401	115	1732	202	229	818	79	579	1084	201
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 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
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
Total Hourly Volume [veh/h]	123	1336	401	115	1732	202	229	818	79	579	1084	201
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]	31	334	100	29	433	51	57	205	20	145	271	50
Total Analysis Volume [veh/h]	123	1336	401	115	1732	202	229	818	79	579	1084	201
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Unsigna	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.21	0.00	0.04	0.27	0.13	0.08	0.19	0.19	0.20	0.23	0.13
Intersection LOS	D											
Intersection V/C	0.801											

Intersection Level Of Service Report
Intersection 22: Madison Street at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.576

Intersection Setup

Name	Madison Street		Sepulveda Boulevard		Sepulveda Boulevard	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Madison Street		Sepulveda Boulevard		Sepulveda Boulevard	
Base Volume Input [veh/h]	27	103	1295	22	121	1897
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	27	103	1295	22	121	1897
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]	7	26	324	6	30	474
Total Analysis Volume [veh/h]	27	103	1295	22	121	1897
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.08	0.21	0.21	0.08	0.40
Intersection LOS	A					
Intersection V/C	0.576					

Intersection Level Of Service Report
Intersection 23: Del Amo Circle E at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.625

Intersection Setup

Name	Del Amo Circle E		Sepulveda Boulevard		Sepulveda Boulevard	
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 Entry Pocket	1	1	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		No	

Volumes

Name	Del Amo Circle E		Sepulveda Boulevard		Sepulveda Boulevard	
Base Volume Input [veh/h]	25	121	85	1307	1903	37
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	25	121	85	1307	1903	37
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]	6	30	21	327	476	9
Total Analysis Volume [veh/h]	25	121	85	1307	1903	37
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Overlap
Signal Group	7	0	5	2	6	6
Auxiliary Signal Groups						6,7
Lead / Lag	Lead	-	Lead	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.08	0.05	0.27	0.40	0.01
Intersection LOS	B					
Intersection V/C	0.625					

Intersection Level Of Service Report
Intersection 24: Madrona Avenue at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.692

Intersection Setup

Name	Madrona Avenue		Sepulveda Boulevard		Sepulveda Boulevard	
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 Entry Pocket	1	1	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		No	

Volumes

Name	Madrona Avenue		Sepulveda Boulevard		Sepulveda Boulevard	
Base Volume Input [veh/h]	366	377	388	924	1584	389
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	366	377	388	924	1584	389
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]	92	94	97	231	396	97
Total Analysis Volume [veh/h]	366	377	388	924	1584	389
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permissive	Overlap	Protected	Permissive	Permissive	Overlap
Signal Group	7	7	5	2	6	6
Auxiliary Signal Groups		5,7				6,7
Lead / Lag	Lead	-	Lead	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.13	0.00	0.13	0.19	0.33	0.12
Intersection LOS	B					
Intersection V/C	0.692					

Intersection Level Of Service Report
Intersection 25: Maple Avenue at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.640

Intersection Setup

Name	Maple Avenue			Maple Avenue			Sepulveda Boulevard			Sepulveda Boulevard		
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 Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Maple Avenue			Maple Avenue			Sepulveda Boulevard			Sepulveda Boulevard		
Base Volume Input [veh/h]	195	397	80	119	355	185	95	997	153	86	1558	169
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 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
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
Total Hourly Volume [veh/h]	195	397	80	119	355	185	95	997	153	86	1558	169
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]	49	99	20	30	89	46	24	249	38	22	390	42
Total Analysis Volume [veh/h]	195	397	80	119	355	185	95	997	153	86	1558	169
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.12	0.15	0.15	0.07	0.11	0.12	0.03	0.24	0.24	0.03	0.27	0.27
Intersection LOS	B											
Intersection V/C	0.640											

Intersection Level Of Service Report
Intersection 26: Crenshaw Boulevard at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.708

Intersection Setup

Name	Crenshaw Boulevard			Crenshaw Boulevard			Sepulveda Boulevard			Sepulveda Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Crenshaw Boulevard			Crenshaw Boulevard			Sepulveda Boulevard			Sepulveda Boulevard		
Base Volume Input [veh/h]	473	1426	248	201	838	149	239	969	232	194	1108	151
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 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
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
Total Hourly Volume [veh/h]	473	1426	248	201	838	149	239	969	232	194	1108	151
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]	118	357	62	50	210	37	60	242	58	49	277	38
Total Analysis Volume [veh/h]	473	1426	248	201	838	149	239	969	232	194	1108	151
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.16	0.22	0.09	0.07	0.17	0.09	0.08	0.20	0.15	0.07	0.17	0.09
Intersection LOS	C											
Intersection V/C	0.708											

Intersection Level Of Service Report
Intersection 27: Western Avenue at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.901

Intersection Setup

Name	Western Avenue			Western Avenue			Carson Street			Carson 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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Western Avenue			Western Avenue			Carson Street			Carson Street		
Base Volume Input [veh/h]	159	1065	115	68	757	144	55	629	112	102	1126	126
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 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
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
Total Hourly Volume [veh/h]	159	1065	115	68	757	144	55	629	112	102	1126	126
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]	40	266	29	17	189	36	14	157	28	26	282	32
Total Analysis Volume [veh/h]	159	1065	115	68	757	144	55	629	112	102	1126	126
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.33	0.07	0.04	0.24	0.09	0.03	0.23	0.23	0.06	0.39	0.39
Intersection LOS	E											
Intersection V/C	0.901											

Intersection Level Of Service Report
Intersection 1: I-405 NB On-Ramp at Redondo Beach Boulevard

Control Type:	Two-way stop	Delay (sec / veh):	19.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.540

Intersection Setup

Name	I-405 NB On-Ramp		Redondo Beach Boulevard		Redondo Beach Boulevard	
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 Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	I-405 NB On-Ramp		Redondo Beach Boulevard		Redondo Beach Boulevard	
Base Volume Input [veh/h]	0	0	293	1384	658	612
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	0	0	293	1384	658	612
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]	0	0	73	346	165	153
Total Analysis Volume [veh/h]	0	0	293	1384	658	612
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						
Number of Storage Spaces in Median	0		0		0	

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.54	0.01	0.01	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	19.14	0.00	0.00	0.00
Movement LOS			C	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	3.19	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	79.80	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		3.34		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.90					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 2: Prairie Avenue at Redondo Beach Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.002

Intersection Setup

Name	Prairie Avenue			Prairie Avenue			Redondo Beach Boulevard			Redondo Beach Boulevard		
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 Entry Pocket	1	0	1	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Prairie Avenue			Prairie Avenue			Redondo Beach Boulevard			Redondo Beach Boulevard		
Base Volume Input [veh/h]	346	868	242	156	725	205	154	846	328	209	681	163
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 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
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
Total Hourly Volume [veh/h]	346	868	242	156	725	205	154	846	328	209	681	163
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	217	61	39	181	51	39	212	82	52	170	41
Total Analysis Volume [veh/h]	346	868	242	156	725	205	154	846	328	209	681	163
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.22	0.27	0.15	0.10	0.29	0.29	0.10	0.26	0.21	0.13	0.21	0.10
Intersection LOS	F											
Intersection V/C	1.002											

Intersection Level Of Service Report
Intersection 3: Prairie Avenue at Artesia Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.837

Intersection Setup

Name	Prairie Avenue			Prairie Avenue			Artesia Boulevard			Artesia Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Prairie Avenue			Prairie Avenue			Artesia Boulevard			Artesia Boulevard		
Base Volume Input [veh/h]	69	1163	314	183	1024	57	106	1004	117	404	965	213
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 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
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
Total Hourly Volume [veh/h]	69	1163	314	183	1024	57	106	1004	117	404	965	213
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]	17	291	79	46	256	14	27	251	29	101	241	53
Total Analysis Volume [veh/h]	69	1163	314	183	1024	57	106	1004	117	404	965	213
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.24	0.06	0.11	0.32	0.04	0.07	0.23	0.23	0.14	0.30	0.13
Intersection LOS	D											
Intersection V/C	0.837											

Intersection Level Of Service Report
Intersection 4: Prairie Avenue at W 182nd Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.859

Intersection Setup

Name	Prairie Avenue			Prairie Avenue			W 182nd Street			W 182nd 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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Prairie Avenue			Prairie Avenue			W 182nd Street			W 182nd Street		
Base Volume Input [veh/h]	78	1297	138	98	1247	134	171	356	112	234	363	78
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 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
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
Total Hourly Volume [veh/h]	78	1297	138	98	1247	134	171	356	112	234	363	78
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]	20	324	35	25	312	34	43	89	28	59	91	20
Total Analysis Volume [veh/h]	78	1297	138	98	1247	134	171	356	112	234	363	78
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	ProtPer	Permiss	Overlap	ProtPer	Permiss	Overlap	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	1	6	6	5	2	2	3	8	0	7	4	0
Auxiliary Signal Groups			6,7			2,3						
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.41	0.09	0.06	0.39	0.08	0.11	0.15	0.15	0.15	0.14	0.14
Intersection LOS	D											
Intersection V/C	0.859											

Intersection Level Of Service Report
Intersection 5: Prairie Avenue at W 190th Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.801

Intersection Setup

Name	Prairie Avenue			Prairie Avenue			W 190th Street			W 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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Prairie Avenue			Prairie Avenue			W 190th Street			W 190th Street		
Base Volume Input [veh/h]	119	1225	549	100	1202	215	216	1030	103	404	774	56
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 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
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
Total Hourly Volume [veh/h]	119	1225	549	100	1202	215	216	1030	103	404	774	56
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]	30	306	137	25	301	54	54	258	26	101	194	14
Total Analysis Volume [veh/h]	119	1225	549	100	1202	215	216	1030	103	404	774	56
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.26	0.20	0.06	0.25	0.13	0.14	0.24	0.24	0.14	0.17	0.17
Intersection LOS	D											
Intersection V/C	0.801											

Intersection Level Of Service Report
Intersection 6: Madrona Avenue at Del Amo Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.767

Intersection Setup

Name	Madrona Avenue			Madrona Avenue			Del Amo Boulevard			Del Amo Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Madrona Avenue			Madrona Avenue			Del Amo Boulevard			Del Amo Boulevard		
Base Volume Input [veh/h]	135	1348	185	166	1265	295	349	693	128	166	665	186
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 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
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
Total Hourly Volume [veh/h]	135	1348	185	166	1265	295	349	693	128	166	665	186
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]	34	337	46	42	316	74	87	173	32	42	166	47
Total Analysis Volume [veh/h]	135	1348	185	166	1265	295	349	693	128	166	665	186
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.28	0.12	0.06	0.26	0.18	0.12	0.22	0.08	0.06	0.21	0.12
Intersection LOS	C											
Intersection V/C	0.767											

Intersection Level Of Service Report
Intersection 7: Anza Avenue at Torrance Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.840

Intersection Setup

Name	Anza Avenue			Anza Avenue			Torrance Boulevard			Torrance Boulevard		
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 Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Anza Avenue			Anza Avenue			Torrance Boulevard			Torrance Boulevard		
Base Volume Input [veh/h]	239	919	96	138	813	137	169	775	194	163	816	191
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 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
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
Total Hourly Volume [veh/h]	239	919	96	138	813	137	169	775	194	163	816	191
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]	60	230	24	35	203	34	42	194	49	41	204	48
Total Analysis Volume [veh/h]	239	919	96	138	813	137	169	775	194	163	816	191
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.32	0.32	0.05	0.30	0.30	0.11	0.24	0.12	0.10	0.26	0.12
Intersection LOS	D											
Intersection V/C	0.840											

Intersection Level Of Service Report
Intersection 8: Hawthorne Boulevard at Torrance Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.769

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Torrance Boulevard			Torrance Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Torrance Boulevard			Torrance Boulevard		
Base Volume Input [veh/h]	274	1795	281	199	1539	183	255	951	308	349	821	189
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 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
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
Total Hourly Volume [veh/h]	274	1795	281	199	1539	183	255	951	308	349	821	189
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]	69	449	70	50	385	46	64	238	77	87	205	47
Total Analysis Volume [veh/h]	274	1795	281	199	1539	183	255	951	308	349	821	189
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.28	0.18	0.07	0.24	0.11	0.09	0.20	0.19	0.12	0.17	0.12
Intersection LOS	C											
Intersection V/C	0.769											

Intersection Level Of Service Report
Intersection 9: Madrona Avenue at Torrance Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.809

Intersection Setup

Name	Madrona Avenue			Madrona Avenue			Torrance Boulevard			Torrance Boulevard		
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 Entry Pocket	1	0	0	1	0	1	1	0	1	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Madrona Avenue			Madrona Avenue			Torrance Boulevard			Torrance Boulevard		
Base Volume Input [veh/h]	154	1106	127	174	1195	253	352	932	226	288	911	107
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 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
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
Total Hourly Volume [veh/h]	154	1106	127	174	1195	253	352	932	226	288	911	107
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]	39	277	32	44	299	63	88	233	57	72	228	27
Total Analysis Volume [veh/h]	154	1106	127	174	1195	253	352	932	226	288	911	107
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.26	0.26	0.06	0.25	0.16	0.12	0.29	0.14	0.10	0.21	0.21
Intersection LOS	D											
Intersection V/C	0.809											

Intersection Level Of Service Report
Intersection 10: Maple Avenue at Torrance Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.678

Intersection Setup

Name	Maple Avenue			Maple Avenue			Torrance Boulevard			Torrance Boulevard		
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 Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Maple Avenue			Maple Avenue			Torrance Boulevard			Torrance Boulevard		
Base Volume Input [veh/h]	46	190	29	74	230	98	68	1126	51	43	1040	38
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 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
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
Total Hourly Volume [veh/h]	46	190	29	74	230	98	68	1126	51	43	1040	38
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]	12	48	7	19	58	25	17	282	13	11	260	10
Total Analysis Volume [veh/h]	46	190	29	74	230	98	68	1126	51	43	1040	38
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.14	0.14	0.05	0.14	0.06	0.04	0.37	0.37	0.03	0.34	0.34
Intersection LOS	B											
Intersection V/C	0.678											

Intersection Level Of Service Report
Intersection 11: Crenshaw Boulevard at Torrance Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.814

Intersection Setup

Name	Crenshaw Boulevard			Crenshaw Boulevard			Torrance Boulevard			Torrance Boulevard		
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 Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Crenshaw Boulevard			Crenshaw Boulevard			Torrance Boulevard			Torrance Boulevard		
Base Volume Input [veh/h]	148	1301	191	175	1280	115	114	913	93	163	880	98
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 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
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
Total Hourly Volume [veh/h]	148	1301	191	175	1280	115	114	913	93	163	880	98
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]	37	325	48	44	320	29	29	228	23	41	220	25
Total Analysis Volume [veh/h]	148	1301	191	175	1280	115	114	913	93	163	880	98
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.31	0.31	0.06	0.29	0.29	0.04	0.29	0.06	0.06	0.18	0.06
Intersection LOS	D											
Intersection V/C	0.814											

Intersection Level Of Service Report
Intersection 12: Hawthorne Boulevard at Fashion Way

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.599

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Fashion Way			Fashion Way		
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 Entry Pocket	1	0	1	1	0	1	0	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Fashion Way			Fashion Way		
Base Volume Input [veh/h]	55	2021	198	196	1982	54	86	0	107	161	17	157
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 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
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
Total Hourly Volume [veh/h]	55	2021	198	196	1982	54	86	0	107	161	17	157
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]	14	505	50	49	496	14	22	0	27	40	4	39
Total Analysis Volume [veh/h]	55	2021	198	196	1982	54	86	0	107	161	17	157
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Permiss	Overlap	Split	Split	Overlap
Signal Group	1	6	0	5	2	0	3	0	3	0	4	4
Auxiliary Signal Groups									1,3			4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.32	0.12	0.07	0.31	0.03	0.05	0.00	0.05	0.06	0.06	0.03
Intersection LOS	A											
Intersection V/C	0.599											

Intersection Level Of Service Report
Intersection 13: Madrona Avenue at Fashion Way

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.555

Intersection Setup

Name	Madrona Avenue		Madrona Avenue			Fashion Way	
Approach	Northbound		Southbound			Eastbound	
Lane Configuration							
Turning Movement	Left	Thru	U-turn	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	0	1	1	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00			30.00	
Grade [%]	0.00		0.00			0.00	
Crosswalk	Yes		No			Yes	

Volumes

Name	Madrona Avenue		Madrona Avenue			Fashion Way	
Base Volume Input [veh/h]	75	1059	15	1356	318	307	234
Base Volume Adjustment Factor	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
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	75	1059	15	1356	318	307	234
Peak Hour Factor	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
Total 15-Minute Volume [veh/h]	19	265	4	339	80	77	59
Total Analysis Volume [veh/h]	75	1059	15	1356	318	307	234
Pedestrian Volume [ped/h]	0		0			0	
Bicycle Volume [bicycles/h]	0		0			0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protected	Permissive	Protected	Permissive	Overlap	Permissive	Permissive
Signal Group	1	6	5	2	2	3	0
Auxiliary Signal Groups					2,3		
Lead / Lag	Lead	-	Lead	-	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.22	0.01	0.28	0.09	0.11	0.15
Intersection LOS	A						
Intersection V/C	0.555						

Intersection Level Of Service Report
Intersection 14: Anza Avenue at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.788

Intersection Setup

Name	Anza Avenue			Anza Avenue			Carson Street			Carson 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 Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Anza Avenue			Anza Avenue			Carson Street			Carson Street		
Base Volume Input [veh/h]	52	1024	179	180	821	44	14	184	30	189	257	184
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 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
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
Total Hourly Volume [veh/h]	52	1024	179	180	821	44	14	184	30	189	257	184
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	256	45	45	205	11	4	46	8	47	64	46
Total Analysis Volume [veh/h]	52	1024	179	180	821	44	14	184	30	189	257	184
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.38	0.38	0.11	0.27	0.27	0.01	0.13	0.13	0.07	0.16	0.12
Intersection LOS	C											
Intersection V/C	0.788											

Intersection Level Of Service Report
Intersection 15: Hawthorne Boulevard at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.835

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Carson Street			Carson 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 Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Carson Street			Carson Street		
Base Volume Input [veh/h]	104	2146	294	318	1859	51	128	544	95	259	446	206
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 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
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
Total Hourly Volume [veh/h]	104	2146	294	318	1859	51	128	544	95	259	446	206
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]	26	537	74	80	465	13	32	136	24	65	112	52
Total Analysis Volume [veh/h]	104	2146	294	318	1859	51	128	544	95	259	446	206
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.34	0.18	0.11	0.30	0.30	0.08	0.20	0.20	0.09	0.09	0.13
Intersection LOS	D											
Intersection V/C	0.835											

Intersection Level Of Service Report
Intersection 16: Del Amo Circle E at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.486

Intersection Setup

Name	Del Amo Circle E			Del Amo Circle E			Carson Street			Carson 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 Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Del Amo Circle E			Del Amo Circle E			Carson Street			Carson Street		
Base Volume Input [veh/h]	77	95	54	104	97	75	80	1047	111	90	883	155
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 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
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
Total Hourly Volume [veh/h]	77	95	54	104	97	75	80	1047	111	90	883	155
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]	19	24	14	26	24	19	20	262	28	23	221	39
Total Analysis Volume [veh/h]	77	95	54	104	97	75	80	1047	111	90	883	155
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	4	0	0	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.05	0.05	0.07	0.05	0.05	0.05	0.22	0.07	0.06	0.18	0.10
Intersection LOS	A											
Intersection V/C	0.486											

Intersection Level Of Service Report
Intersection 17: Madrona Avenue at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.650

Intersection Setup

Name	Madrona Avenue			Madrona Avenue			Carson Street			Carson 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 Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Madrona Avenue			Madrona Avenue			Carson Street			Carson Street		
Base Volume Input [veh/h]	93	829	163	347	942	265	198	943	106	52	755	147
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 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
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
Total Hourly Volume [veh/h]	93	829	163	347	942	265	198	943	106	52	755	147
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]	23	207	41	87	236	66	50	236	27	13	189	37
Total Analysis Volume [veh/h]	93	829	163	347	942	265	198	943	106	52	755	147
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.17	0.10	0.12	0.20	0.17	0.07	0.20	0.07	0.03	0.19	0.19
Intersection LOS	B											
Intersection V/C	0.650											

Intersection Level Of Service Report
Intersection 18: Maple Avenue at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.833

Intersection Setup

Name	Maple Avenue			Maple Avenue			Carson Street			Carson 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 Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Maple Avenue			Maple Avenue			Carson Street			Carson Street		
Base Volume Input [veh/h]	69	221	92	77	258	35	28	1403	92	82	893	43
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 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
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
Total Hourly Volume [veh/h]	69	221	92	77	258	35	28	1403	92	82	893	43
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]	17	55	23	19	65	9	7	351	23	21	223	11
Total Analysis Volume [veh/h]	69	221	92	77	258	35	28	1403	92	82	893	43
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	4	0	0	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.20	0.20	0.05	0.18	0.18	0.02	0.44	0.06	0.05	0.28	0.03
Intersection LOS	D											
Intersection V/C	0.833											

Intersection Level Of Service Report
Intersection 19: Crenshaw Boulevard at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.820

Intersection Setup

Name	Crenshaw Boulevard			Crenshaw Boulevard			Carson Street			Carson 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 Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Crenshaw Boulevard			Crenshaw Boulevard			Carson Street			Carson Street		
Base Volume Input [veh/h]	107	1206	312	320	1205	146	223	1203	75	263	809	153
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 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
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
Total Hourly Volume [veh/h]	107	1206	312	320	1205	146	223	1203	75	263	809	153
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]	27	302	78	80	301	37	56	301	19	66	202	38
Total Analysis Volume [veh/h]	107	1206	312	320	1205	146	223	1203	75	263	809	153
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

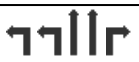
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.25	0.20	0.11	0.28	0.28	0.08	0.27	0.27	0.09	0.25	0.10
Intersection LOS	D											
Intersection V/C	0.820											

Intersection Level Of Service Report
Intersection 20: Anza Avenue at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.805

Intersection Setup

Name	Anza Avenue			Anza Avenue			Sepulveda Boulevard			Sepulveda Boulevard		
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 Entry Pocket	1	0	1	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Anza Avenue			Anza Avenue			Sepulveda Boulevard			Sepulveda Boulevard		
Base Volume Input [veh/h]	180	767	201	182	774	103	176	799	226	198	694	277
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 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
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
Total Hourly Volume [veh/h]	180	767	201	182	774	103	176	799	226	198	694	277
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]	45	192	50	46	194	26	44	200	57	50	174	69
Total Analysis Volume [veh/h]	180	767	201	182	774	103	176	799	226	198	694	277
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.11	0.24	0.13	0.11	0.27	0.27	0.06	0.25	0.14	0.07	0.22	0.17
Intersection LOS	D											
Intersection V/C	0.805											

Intersection Level Of Service Report
Intersection 21: Hawthorne Boulevard at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.905

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Sepulveda Boulevard			Sepulveda Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Sepulveda Boulevard			Sepulveda Boulevard		
Base Volume Input [veh/h]	244	1858	649	292	1754	235	274	965	119	541	816	210
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 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
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
Total Hourly Volume [veh/h]	244	1858	649	292	1754	235	274	965	119	541	816	210
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]	61	465	162	73	439	59	69	241	30	135	204	53
Total Analysis Volume [veh/h]	244	1858	649	292	1754	235	274	965	119	541	816	210
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Unsigna	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.29	0.00	0.10	0.27	0.15	0.10	0.23	0.23	0.19	0.17	0.13
Intersection LOS	E											
Intersection V/C	0.905											

Intersection Level Of Service Report
Intersection 22: Madison Street at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.626

Intersection Setup

Name	Madison Street		Sepulveda Boulevard		Sepulveda Boulevard	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Madison Street		Sepulveda Boulevard		Sepulveda Boulevard	
Base Volume Input [veh/h]	18	214	1895	62	120	1553
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	18	214	1895	62	120	1553
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]	5	54	474	16	30	388
Total Analysis Volume [veh/h]	18	214	1895	62	120	1553
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.15	0.31	0.31	0.08	0.32
Intersection LOS	B					
Intersection V/C	0.626					

Intersection Level Of Service Report
Intersection 23: Del Amo Circle E at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.624

Intersection Setup

Name	Del Amo Circle E		Sepulveda Boulevard		Sepulveda Boulevard	
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 Entry Pocket	1	1	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		No	

Volumes

Name	Del Amo Circle E		Sepulveda Boulevard		Sepulveda Boulevard	
Base Volume Input [veh/h]	155	158	180	1914	1499	93
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	155	158	180	1914	1499	93
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]	39	40	45	479	375	23
Total Analysis Volume [veh/h]	155	158	180	1914	1499	93
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Overlap
Signal Group	7	0	5	2	6	6
Auxiliary Signal Groups						6,7
Lead / Lag	Lead	-	Lead	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.10	0.11	0.40	0.31	0.00
Intersection LOS	B					
Intersection V/C	0.624					

Intersection Level Of Service Report
Intersection 24: Madrona Avenue at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.766

Intersection Setup

Name	Madrona Avenue		Sepulveda Boulevard		Sepulveda Boulevard	
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 Entry Pocket	1	1	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		No	

Volumes

Name	Madrona Avenue		Sepulveda Boulevard		Sepulveda Boulevard	
Base Volume Input [veh/h]	609	296	547	1448	1269	357
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	609	296	547	1448	1269	357
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]	152	74	137	362	317	89
Total Analysis Volume [veh/h]	609	296	547	1448	1269	357
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permissive	Overlap	Protected	Permissive	Permissive	Overlap
Signal Group	7	7	5	2	6	6
Auxiliary Signal Groups		5,7				6,7
Lead / Lag	Lead	-	Lead	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.21	0.00	0.19	0.30	0.26	0.01
Intersection LOS	C					
Intersection V/C	0.766					

Intersection Level Of Service Report
Intersection 25: Maple Avenue at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.729

Intersection Setup

Name	Maple Avenue			Maple Avenue			Sepulveda Boulevard			Sepulveda Boulevard		
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 Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Maple Avenue			Maple Avenue			Sepulveda Boulevard			Sepulveda Boulevard		
Base Volume Input [veh/h]	192	293	84	96	320	100	178	1525	275	97	1267	95
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 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
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
Total Hourly Volume [veh/h]	192	293	84	96	320	100	178	1525	275	97	1267	95
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]	48	73	21	24	80	25	45	381	69	24	317	24
Total Analysis Volume [veh/h]	192	293	84	96	320	100	178	1525	275	97	1267	95
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.12	0.12	0.12	0.06	0.10	0.06	0.06	0.38	0.38	0.03	0.21	0.21
Intersection LOS	C											
Intersection V/C	0.729											

Intersection Level Of Service Report
Intersection 26: Crenshaw Boulevard at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.964

Intersection Setup

Name	Crenshaw Boulevard			Crenshaw Boulevard			Sepulveda Boulevard			Sepulveda Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Crenshaw Boulevard			Crenshaw Boulevard			Sepulveda Boulevard			Sepulveda Boulevard		
Base Volume Input [veh/h]	425	953	203	172	1306	199	202	1306	521	343	1104	156
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 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
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
Total Hourly Volume [veh/h]	425	953	203	172	1306	199	202	1306	521	343	1104	156
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]	106	238	51	43	327	50	51	327	130	86	276	39
Total Analysis Volume [veh/h]	425	953	203	172	1306	199	202	1306	521	343	1104	156
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.15	0.15	0.01	0.06	0.27	0.12	0.07	0.27	0.33	0.12	0.17	0.10
Intersection LOS	E											
Intersection V/C	0.964											

Intersection Level Of Service Report
Intersection 27: Western Avenue at Carson Street

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.920

Intersection Setup

Name	Western Avenue			Western Avenue			Carson Street			Carson 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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Western Avenue			Western Avenue			Carson Street			Carson Street		
Base Volume Input [veh/h]	129	811	163	212	1069	183	59	1040	129	64	868	105
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 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
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
Total Hourly Volume [veh/h]	129	811	163	212	1069	183	59	1040	129	64	868	105
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]	32	203	41	53	267	46	15	260	32	16	217	26
Total Analysis Volume [veh/h]	129	811	163	212	1069	183	59	1040	129	64	868	105
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.25	0.10	0.13	0.33	0.11	0.04	0.37	0.37	0.04	0.30	0.30
Intersection LOS	E											
Intersection V/C	0.920											

APPENDIX B-IV

EXISTING WITH AMBIENT GROWTH (YEAR 2028) WITH PROJECT TRAFFIC CONDITIONS WITH IMPROVEMENTS

Intersection Level Of Service Report
Intersection 2: Prairie Avenue at Redondo Beach Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.839

Intersection Setup

Name	Prairie Avenue			Prairie Avenue			Redondo Beach Boulevard			Redondo Beach Boulevard		
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 Entry Pocket	1	0	1	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Prairie Avenue			Prairie Avenue			Redondo Beach Boulevard			Redondo Beach Boulevard		
Base Volume Input [veh/h]	344	533	183	131	896	199	111	521	235	213	722	156
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 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
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
Total Hourly Volume [veh/h]	344	533	183	131	896	199	111	521	235	213	722	156
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]	86	133	46	33	224	50	28	130	59	53	181	39
Total Analysis Volume [veh/h]	344	533	183	131	896	199	111	521	235	213	722	156
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.22	0.17	0.11	0.08	0.23	0.23	0.07	0.16	0.15	0.13	0.23	0.10
Intersection LOS	D											
Intersection V/C	0.839											

Intersection Level Of Service Report
Intersection 2: Prairie Avenue at Redondo Beach Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.905

Intersection Setup

Name	Prairie Avenue			Prairie Avenue			Redondo Beach Boulevard			Redondo Beach Boulevard		
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 Entry Pocket	1	0	1	1	0	0	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Prairie Avenue			Prairie Avenue			Redondo Beach Boulevard			Redondo Beach Boulevard		
Base Volume Input [veh/h]	346	868	242	156	725	205	154	846	328	209	681	163
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 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
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
Total Hourly Volume [veh/h]	346	868	242	156	725	205	154	846	328	209	681	163
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	217	61	39	181	51	39	212	82	52	170	41
Total Analysis Volume [veh/h]	346	868	242	156	725	205	154	846	328	209	681	163
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.22	0.27	0.15	0.10	0.19	0.19	0.10	0.26	0.21	0.13	0.21	0.10
Intersection LOS	E											
Intersection V/C	0.905											

APPENDIX C

CALTRANS INTERSECTION LEVEL OF SERVICE CALCULATION WORKSHEETS

APPENDIX C-I

EXISTING TRAFFIC CONDITIONS

Intersection Level Of Service Report
Intersection 1: I-405 NB On-Ramp at Redondo Beach Boulevard

Control Type:	Two-way stop	Delay (sec / veh):	13.0
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.199

Intersection Setup

Name	I-405 NB On-Ramp		Redondo Beach Boulevard		Redondo Beach Boulevard	
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 Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	I-405 NB On-Ramp		Redondo Beach Boulevard		Redondo Beach Boulevard	
Base Volume Input [veh/h]	0	0	111	883	623	616
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	0	0	111	883	623	616
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]	0	0	28	221	156	154
Total Analysis Volume [veh/h]	0	0	111	883	623	616
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			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.20	0.01	0.01	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	13.05	0.00	0.00	0.00
Movement LOS			B	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.74	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	18.39	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		1.46		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.65					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 8: Hawthorne Boulevard at Torrance Boulevard

Control Type:	Signalized	Delay (sec / veh):	34.8
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.609

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Torrance Boulevard			Torrance Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Torrance Boulevard			Torrance Boulevard		
Base Volume Input [veh/h]	215	1093	143	142	1446	210	235	745	138	326	940	147
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
Proportion of CAVs [%]	0.00											
Growth 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
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]	215	1093	143	142	1446	210	235	745	138	326	940	147
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]	54	273	36	36	362	53	59	186	35	82	235	37
Total Analysis Volume [veh/h]	215	1093	143	142	1446	210	235	745	138	326	940	147
Presence of On-Street Parking	No		No	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]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	6	6	0	6	6	0	6	6	0	6	6	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	12	43	0	11	42	0	16	49	0	17	50	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	31	0	0	31	0	0	38	0	0	38	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	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	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	8	60	60	7	59	59	10	24	24	13	27	27
g / C, Green / Cycle	0.07	0.50	0.50	0.06	0.49	0.49	0.08	0.20	0.20	0.11	0.22	0.22
(v / s)_i Volume / Saturation Flow Rate	0.06	0.16	0.09	0.04	0.21	0.13	0.07	0.15	0.09	0.09	0.18	0.09
s, saturation flow rate [veh/h]	3459	6792	1589	3459	6792	1589	3459	5094	1589	3459	5094	1589
c, Capacity [veh/h]	233	3407	797	198	3339	781	294	1014	316	376	1135	354
d1, Uniform Delay [s]	55.68	17.77	16.38	55.64	19.72	17.88	53.92	45.12	42.18	52.64	44.47	39.96
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	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	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	14.20	0.25	0.49	4.79	0.41	0.84	4.99	1.05	0.95	6.07	1.62	0.78
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	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	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	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.92	0.32	0.18	0.72	0.43	0.27	0.80	0.73	0.44	0.87	0.83	0.42
d, Delay for Lane Group [s/veh]	69.88	18.02	16.88	60.43	20.13	18.73	58.91	46.17	43.13	58.71	46.09	40.73
Lane Group LOS	E	B	B	E	C	B	E	D	D	E	D	D
Critical Lane Group	Yes	No	No	No	Yes	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	3.69	4.52	2.26	2.25	6.55	3.58	3.69	7.03	3.68	5.15	9.02	3.81
50th-Percentile Queue Length [ft/ln]	92.36	113.08	56.58	56.16	163.65	89.54	92.18	175.75	92.10	128.68	225.51	95.18
95th-Percentile Queue Length [veh/ln]	6.65	8.01	4.07	4.04	10.74	6.45	6.64	11.38	6.63	8.87	13.95	6.85
95th-Percentile Queue Length [ft/ln]	166.26	200.28	101.85	101.09	268.54	161.18	165.92	284.46	165.79	221.70	348.65	171.33

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	69.88	18.02	16.88	60.43	20.13	18.73	58.91	46.17	43.13	58.71	46.09	40.73
Movement LOS	E	B	B	E	C	B	E	D	D	E	D	D
d_A, Approach Delay [s/veh]	25.59			23.15			48.47			48.44		
Approach LOS	C			C			D			D		
d_I, Intersection Delay [s/veh]	34.84											
Intersection LOS	C											
Intersection V/C	0.609											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	49.52	49.52	49.52	49.52
l_p,int, Pedestrian LOS Score for Intersection	3.390	3.382	3.132	3.128
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	650	633	750	766
d_b, Bicycle Delay [s]	27.35	28.03	23.45	22.83
l_b,int, Bicycle LOS Score for Intersection	2.158	2.301	2.175	2.337
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 12: Hawthorne Boulevard at Fashion Way

Control Type:	Signalized	Delay (sec / veh):	10.7
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.412

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Fashion Way			Fashion Way		
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 Entry Pocket	1	0	1	1	0	1	0	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Fashion Way			Fashion Way		
Base Volume Input [veh/h]	63	1331	85	69	1790	72	40	0	41	52	25	59
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
Proportion of CAVs [%]	0.00											
Growth 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
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]	63	1331	85	69	1790	72	40	0	41	52	25	59
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]	16	333	21	17	448	18	10	0	10	13	6	15
Total Analysis Volume [veh/h]	63	1331	85	69	1790	72	40	0	41	52	25	59
Presence of On-Street Parking	No		No	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]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Permiss	Overlap	Split	Split	Overlap
Signal Group	1	6	0	5	2	0	8	8	8	0	4	4
Auxiliary Signal Groups									1,8			4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lag	-	-	-	-	-
Minimum Green [s]	6	6	0	6	6	0	6	6	6	0	6	6
Maximum Green [s]	30	30	0	30	30	0	30	30	30	0	30	30
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	0.0	3.0	3.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	0.0	1.0	1.0
Split [s]	10	54	0	26	70	0	10	10	10	0	10	10
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	0.0	3.0	3.0
Walk [s]	0	7	0	0	7	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	18	0	0	14	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No		No				No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	0.0	2.0	2.0
Minimum Recall	No	No		No	No		No		No		No	No
Maximum Recall	No	No		No	No		No		No		No	No
Pedestrian Recall	No	No		No	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	R	L	C	R	L	R	L	C	R
C, Cycle Length [s]	100	100	100	100	100	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	0.00
g_i, Effective Green Time [s]	5	67	67	5	67	67	6	15	6	6	25
g / C, Green / Cycle	0.05	0.67	0.67	0.05	0.67	0.67	0.06	0.15	0.06	0.06	0.25
(v / s)_i Volume / Saturation Flow Rate	0.02	0.20	0.05	0.02	0.26	0.05	0.03	0.03	0.02	0.02	0.04
s, saturation flow rate [veh/h]	3459	6792	1589	3459	6792	1589	1344	1589	1781	1837	1589
c, Capacity [veh/h]	172	4552	1065	178	4563	1068	122	237	105	108	397
d1, Uniform Delay [s]	45.99	6.76	5.74	45.92	7.31	5.64	47.78	37.16	45.27	45.26	29.24
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	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	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.29	0.16	0.15	1.38	0.25	0.12	1.54	0.34	2.11	2.00	0.17
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	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	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	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.37	0.29	0.08	0.39	0.39	0.07	0.33	0.17	0.36	0.36	0.15
d, Delay for Lane Group [s/veh]	47.28	6.93	5.89	47.30	7.57	5.76	49.32	37.50	47.39	47.26	29.41
Lane Group LOS	D	A	A	D	A	A	D	D	D	D	C
Critical Lane Group	Yes	No	No	No	Yes	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.79	2.66	0.61	0.86	3.88	0.51	1.04	0.90	0.97	0.98	1.12
50th-Percentile Queue Length [ft/ln]	19.64	66.40	15.21	21.51	96.94	12.68	25.88	22.38	24.25	24.55	27.96
95th-Percentile Queue Length [veh/ln]	1.41	4.78	1.10	1.55	6.98	0.91	1.86	1.61	1.75	1.77	2.01
95th-Percentile Queue Length [ft/ln]	35.35	119.52	27.38	38.72	174.49	22.83	46.58	40.28	43.65	44.19	50.32

Movement, Approach, & Intersection Results

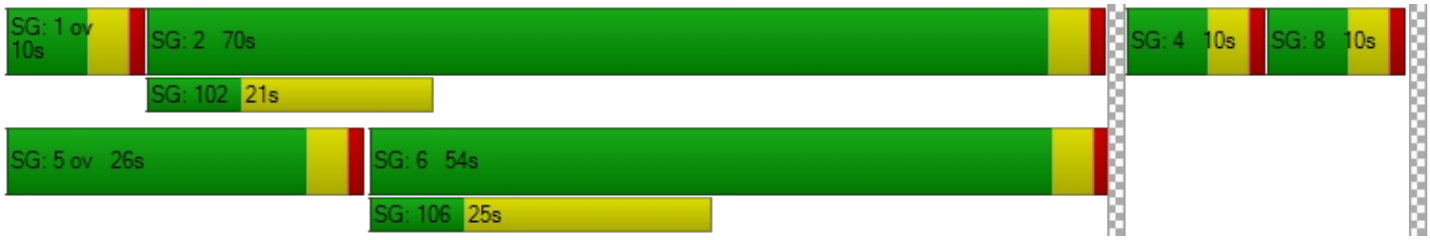
d_M, Delay for Movement [s/veh]	47.28	6.93	5.89	47.30	7.57	5.76	49.32	0.00	37.50	47.35	47.26	29.41
Movement LOS	D	A	A	D	A	A	D		D	D	D	C
d_A, Approach Delay [s/veh]	8.59			8.92			43.34			39.55		
Approach LOS	A			A			D			D		
d_I, Intersection Delay [s/veh]	10.70											
Intersection LOS	B											
Intersection V/C	0.412											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	11.0	11.0
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	39.61	39.61
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.195	2.361
Crosswalk LOS	F	F	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1000	1320	120	120
d_b, Bicycle Delay [s]	12.51	5.78	44.19	44.19
l_b,int, Bicycle LOS Score for Intersection	2.170	2.356	1.560	1.784
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Hawthorne Boulevard at Carson Street

Control Type:	Signalized	Delay (sec / veh):	25.5
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.638

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Carson Street			Carson 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 Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Carson Street			Carson Street		
Base Volume Input [veh/h]	111	1327	141	123	1617	67	64	455	69	281	534	144
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
Proportion of CAVs [%]	0.00											
Growth 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
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]	111	1327	141	123	1617	67	64	455	69	281	534	144
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]	28	332	35	31	404	17	16	114	17	70	134	36
Total Analysis Volume [veh/h]	111	1327	141	123	1617	67	64	455	69	281	534	144
Presence of On-Street Parking	No		No	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]	95
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	6	6	0	6	6	0	6	6	0	6	6	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	12	39	0	10	37	0	11	32	0	14	35	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	28	0	0	24	0	0	21	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	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	R	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	95	95	95	95	95	95	95	95	95	95	95	95
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	7	47	47	6	46	46	5	16	16	10	21	21
g / C, Green / Cycle	0.08	0.50	0.50	0.06	0.48	0.48	0.05	0.17	0.17	0.10	0.22	0.22
(v / s)_i Volume / Saturation Flow Rate	0.06	0.20	0.09	0.04	0.24	0.24	0.04	0.14	0.14	0.08	0.10	0.09
s, saturation flow rate [veh/h]	1781	6792	1589	3459	5094	1821	1781	1870	1785	3459	5094	1589
c, Capacity [veh/h]	141	3368	788	213	2437	871	94	322	308	353	1129	352
d1, Uniform Delay [s]	43.03	15.03	13.27	43.44	17.11	17.11	44.29	38.03	38.07	41.77	32.20	31.70
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	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	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.31	0.35	0.50	2.45	0.76	2.12	8.42	5.47	5.92	4.14	0.31	0.76
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	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	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	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.79	0.39	0.18	0.58	0.51	0.51	0.68	0.83	0.83	0.80	0.47	0.41
d, Delay for Lane Group [s/veh]	52.34	15.37	13.76	45.89	17.87	19.23	52.71	43.49	44.00	45.90	32.51	32.46
Lane Group LOS	D	B	B	D	B	B	D	D	D	D	C	C
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.90	4.37	1.72	1.47	6.11	6.88	1.69	6.41	6.20	3.39	3.55	2.87
50th-Percentile Queue Length [ft/ln]	72.60	109.20	42.94	36.75	152.65	172.00	42.24	160.16	155.07	84.77	88.71	71.86
95th-Percentile Queue Length [veh/ln]	5.23	7.80	3.09	2.65	10.16	11.18	3.04	10.56	10.29	6.10	6.39	5.17
95th-Percentile Queue Length [ft/ln]	130.68	194.89	77.29	66.14	253.96	279.54	76.04	263.93	257.18	152.58	159.67	129.35

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	52.34	15.37	13.76	45.89	18.19	19.23	52.71	43.70	44.00	45.90	32.51	32.46
Movement LOS	D	B	B	D	B	B	D	D	D	D	C	C
d_A, Approach Delay [s/veh]	17.83			20.11			44.72			36.43		
Approach LOS	B			C			D			D		
d_I, Intersection Delay [s/veh]	25.49											
Intersection LOS	C											
Intersection V/C	0.638											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	37.18	37.18	37.18	37.18
l_p,int, Pedestrian LOS Score for Intersection	3.314	3.295	2.666	2.932
Crosswalk LOS	C	C	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	736	694	589	652
d_b, Bicycle Delay [s]	18.98	20.27	23.66	21.59
l_b,int, Bicycle LOS Score for Intersection	2.211	2.305	2.045	2.087
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 21: Hawthorne Boulevard at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	39.1
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.706

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Sepulveda Boulevard			Sepulveda Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Sepulveda Boulevard			Sepulveda Boulevard		
Base Volume Input [veh/h]	120	1309	392	113	1696	198	224	800	77	563	1058	197
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
Proportion of CAVs [%]	0.00											
Growth 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
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]	120	1309	392	113	1696	198	224	800	77	563	1058	197
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]	30	327	98	28	424	50	56	200	19	141	265	49
Total Analysis Volume [veh/h]	120	1309	392	113	1696	198	224	800	77	563	1058	197
Presence of On-Street Parking	No		No	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]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Unsigna	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	6	6	0	6	6	0	6	6	0	6	6	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	10	42	0	10	42	0	13	46	0	22	55	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	31	0	0	28	0	0	35	0	0	35	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	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	L	C	R	L	C	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	6	57	6	57	57	9	23	23	18	32	32
g / C, Green / Cycle	0.05	0.47	0.05	0.47	0.47	0.08	0.19	0.19	0.15	0.27	0.27
(v / s)_i Volume / Saturation Flow Rate	0.03	0.19	0.03	0.25	0.12	0.06	0.16	0.16	0.16	0.21	0.12
s, saturation flow rate [veh/h]	3459	6792	3459	6792	1589	3459	3560	1787	3459	5094	1589
c, Capacity [veh/h]	175	3218	172	3211	752	262	687	345	520	1363	425
d1, Uniform Delay [s]	56.05	20.59	56.05	22.24	19.06	54.84	46.76	46.78	51.01	40.64	36.75
k, delay calibration	0.11	0.50	0.11	0.50	0.50	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	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.69	0.38	4.25	0.63	0.85	7.89	3.05	5.93	45.37	0.98	0.79
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	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	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	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.69	0.41	0.66	0.53	0.26	0.86	0.85	0.85	1.08	0.78	0.46
d, Delay for Lane Group [s/veh]	60.75	20.97	60.30	22.86	19.91	62.73	49.80	52.71	96.38	41.61	37.54
Lane Group LOS	E	C	E	C	B	E	D	D	F	D	D
Critical Lane Group	Yes	No	No	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.90	6.02	1.78	8.43	3.50	3.63	8.67	9.01	11.06	9.71	4.93
50th-Percentile Queue Length [ft/ln]	47.58	150.49	44.61	210.77	87.42	90.84	216.82	225.25	276.55	242.70	123.37
95th-Percentile Queue Length [veh/ln]	3.43	10.04	3.21	13.19	6.29	6.54	13.50	13.93	17.13	14.82	8.58
95th-Percentile Queue Length [ft/ln]	85.64	251.08	80.30	329.82	157.35	163.50	337.56	348.32	428.20	370.45	214.45

Movement, Approach, & Intersection Results

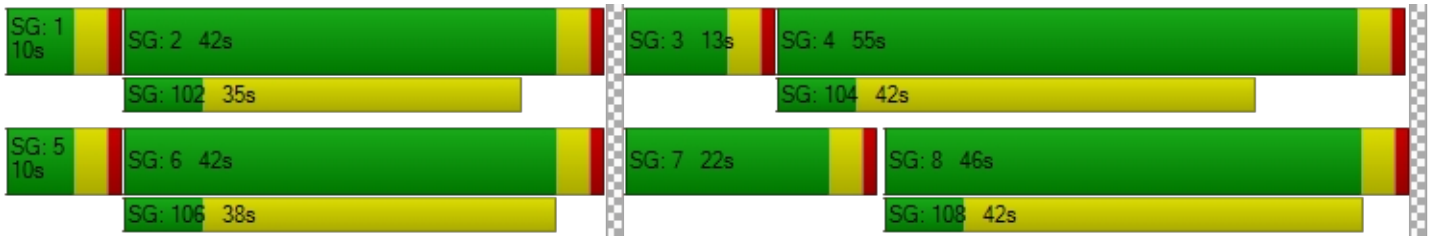
d_M, Delay for Movement [s/veh]	60.75	20.97	0.00	60.30	22.86	19.91	62.73	50.59	52.71	96.38	41.61	37.54
Movement LOS	E	C		E	C	B	E	D	D	F	D	D
d_A, Approach Delay [s/veh]	24.31			24.68			53.21			58.13		
Approach LOS	C			C			D			E		
d_I, Intersection Delay [s/veh]	39.11											
Intersection LOS	D											
Intersection V/C	0.706											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	49.52	49.52	49.52	49.52
l_p,int, Pedestrian LOS Score for Intersection	3.426	3.423	3.041	3.159
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	633	633	700	850
d_b, Bicycle Delay [s]	28.03	28.03	25.36	19.85
l_b,int, Bicycle LOS Score for Intersection	2.149	2.387	2.165	2.560
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 27: Western Avenue at Carson Street

Control Type:	Signalized	Delay (sec / veh):	27.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.766

Intersection Setup

Name	Western Avenue			Western Avenue			Carson Street			Carson 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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Western Avenue			Western Avenue			Carson Street			Carson Street		
Base Volume Input [veh/h]	156	1043	113	67	741	141	54	604	110	100	1100	123
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
Proportion of CAVs [%]	0.00											
Growth 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
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]	156	1043	113	67	741	141	54	604	110	100	1100	123
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]	39	261	28	17	185	35	14	151	28	25	275	31
Total Analysis Volume [veh/h]	156	1043	113	67	741	141	54	604	110	100	1100	123
Presence of On-Street Parking	No		No	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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
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	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	6	6	0	6	6	0	0	6	0	0	6	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	19	38	0	10	29	0	0	42	0	0	42	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	18	0	0	18	0	0	21	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	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	R	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	10	35	35	5	30	30	38	38	38	38	38	38
g / C, Green / Cycle	0.11	0.39	0.39	0.05	0.34	0.34	0.42	0.42	0.42	0.42	0.42	0.42
(v / s)_i Volume / Saturation Flow Rate	0.09	0.29	0.07	0.04	0.21	0.09	0.12	0.20	0.20	0.14	0.33	0.33
s, saturation flow rate [veh/h]	1781	3560	1589	1781	3560	1589	456	1870	1771	736	1870	1805
c, Capacity [veh/h]	192	1388	620	99	1201	536	128	788	746	268	788	761
d1, Uniform Delay [s]	39.27	23.70	18.04	41.75	24.97	21.69	40.82	18.74	18.75	28.92	22.56	22.61
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.30	0.30
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
d2, Incremental Delay [s]	7.97	3.79	0.65	7.95	2.38	1.19	2.20	0.43	0.45	0.86	4.88	5.19
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	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	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	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.81	0.75	0.18	0.68	0.62	0.26	0.42	0.46	0.47	0.37	0.79	0.79
d, Delay for Lane Group [s/veh]	47.24	27.48	18.68	49.70	27.35	22.89	43.02	19.17	19.21	29.78	27.44	27.80
Lane Group LOS	D	C	B	D	C	C	D	B	B	C	C	C
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.75	9.85	1.62	1.66	6.80	2.30	1.27	5.37	5.10	1.89	11.83	11.55
50th-Percentile Queue Length [ft/ln]	93.70	246.29	40.39	41.56	170.04	57.39	31.79	134.13	127.54	47.13	295.67	288.79
95th-Percentile Queue Length [veh/ln]	6.75	15.00	2.91	2.99	11.08	4.13	2.29	9.16	8.81	3.39	17.47	17.13
95th-Percentile Queue Length [ft/ln]	168.65	374.98	72.71	74.81	276.96	103.30	57.23	229.10	220.15	84.84	436.67	428.13

Movement, Approach, & Intersection Results

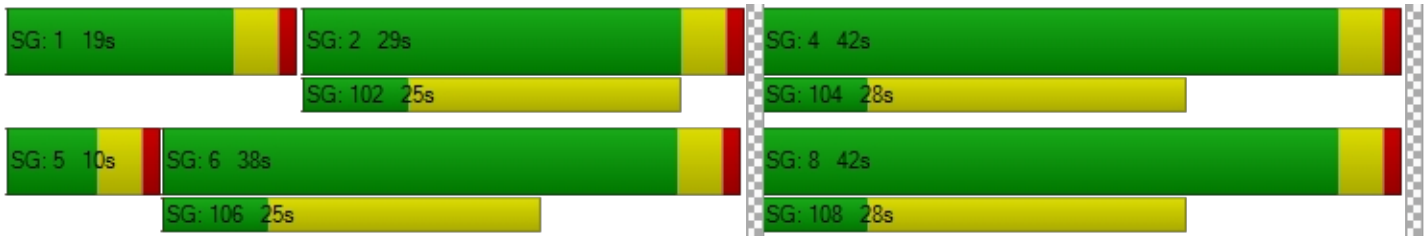
d_M, Delay for Movement [s/veh]	47.24	27.48	18.68	49.70	27.35	22.89	43.02	19.18	19.21	29.78	27.60	27.80
Movement LOS	D	C	B	D	C	C	D	B	B	C	C	C
d_A, Approach Delay [s/veh]	29.07			28.26			20.86			27.78		
Approach LOS	C			C			C			C		
d_I, Intersection Delay [s/veh]	27.05											
Intersection LOS	C											
Intersection V/C	0.766											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	34.68	34.68	34.68	34.68
l_p,int, Pedestrian LOS Score for Intersection	2.962	2.882	2.722	2.710
Crosswalk LOS	C	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	755	555	844	844
d_b, Bicycle Delay [s]	17.43	23.48	15.03	15.03
l_b,int, Bicycle LOS Score for Intersection	2.642	2.343	2.193	2.651
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 1: I-405 NB On-Ramp at Redondo Beach Boulevard

Control Type:	Two-way stop	Delay (sec / veh):	17.9
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.510

Intersection Setup

Name	I-405 NB On-Ramp		Redondo Beach Boulevard		Redondo Beach Boulevard	
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 Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	I-405 NB On-Ramp		Redondo Beach Boulevard		Redondo Beach Boulevard	
Base Volume Input [veh/h]	0	0	287	1335	644	586
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	0	0	287	1335	644	586
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]	0	0	72	334	161	147
Total Analysis Volume [veh/h]	0	0	287	1335	644	586
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			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.51	0.01	0.01	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	17.88	0.00	0.00	0.00
Movement LOS			C	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	2.89	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	72.13	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		3.16		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.80					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 8: Hawthorne Boulevard at Torrance Boulevard

Control Type:	Signalized	Delay (sec / veh):	36.8
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.694

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Torrance Boulevard			Torrance Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Torrance Boulevard			Torrance Boulevard		
Base Volume Input [veh/h]	266	1755	275	195	1502	179	250	931	299	342	804	185
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
Proportion of CAVs [%]	0.00											
Growth 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
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]	266	1755	275	195	1502	179	250	931	299	342	804	185
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]	67	439	69	49	376	45	63	233	75	86	201	46
Total Analysis Volume [veh/h]	266	1755	275	195	1502	179	250	931	299	342	804	185
Presence of On-Street Parking	No		No	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]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	6	6	0	6	6	0	6	6	0	6	6	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	13	43	0	12	42	0	15	49	0	16	50	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	31	0	0	31	0	0	38	0	0	38	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	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	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	9	56	56	8	55	55	11	27	27	12	29	29
g / C, Green / Cycle	0.08	0.47	0.47	0.07	0.46	0.46	0.09	0.23	0.23	0.10	0.24	0.24
(v / s)_i Volume / Saturation Flow Rate	0.08	0.26	0.17	0.06	0.22	0.11	0.07	0.18	0.19	0.10	0.16	0.12
s, saturation flow rate [veh/h]	3459	6792	1589	3459	6792	1589	3459	5094	1589	3459	5094	1589
c, Capacity [veh/h]	262	3191	747	233	3135	734	306	1166	364	348	1227	383
d1, Uniform Delay [s]	55.49	22.75	20.40	55.34	22.35	19.61	53.76	43.67	43.95	53.90	41.07	39.14
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	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	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	30.12	0.69	1.40	7.76	0.53	0.79	5.30	1.30	4.65	18.86	0.60	0.94
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	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	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	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.02	0.55	0.37	0.84	0.48	0.24	0.82	0.80	0.82	0.98	0.66	0.48
d, Delay for Lane Group [s/veh]	85.61	23.44	21.80	63.10	22.87	20.40	59.06	44.97	48.60	72.76	41.67	40.09
Lane Group LOS	F	C	C	E	C	C	E	D	D	E	D	D
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	5.05	8.89	5.20	3.17	7.37	3.20	3.93	8.81	8.88	6.06	7.20	4.80
50th-Percentile Queue Length [ft/ln]	126.23	222.26	130.03	79.18	184.23	79.90	98.32	220.21	221.90	151.41	180.12	119.90
95th-Percentile Queue Length [veh/ln]	8.78	13.78	8.94	5.70	11.82	5.75	7.08	13.68	13.76	10.09	11.61	8.39
95th-Percentile Queue Length [ft/ln]	219.55	344.50	223.54	142.53	295.53	143.83	176.97	341.89	344.05	252.31	290.17	209.68

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	85.61	23.44	21.80	63.10	22.87	20.40	59.06	44.97	48.60	72.76	41.67	40.09
Movement LOS	F	C	C	E	C	C	E	D	D	E	D	D
d_A, Approach Delay [s/veh]	30.44			26.82			48.08			49.44		
Approach LOS	C			C			D			D		
d_I, Intersection Delay [s/veh]	36.83											
Intersection LOS	D											
Intersection V/C	0.694											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	49.52	49.52	49.52	49.52
l_p,int, Pedestrian LOS Score for Intersection	3.485	3.452	3.159	3.159
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	650	633	750	766
d_b, Bicycle Delay [s]	27.35	28.03	23.45	22.83
l_b,int, Bicycle LOS Score for Intersection	2.507	2.333	2.374	2.292
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 12: Hawthorne Boulevard at Fashion Way

Control Type:	Signalized	Delay (sec / veh):	16.7
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.585

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Fashion Way			Fashion Way		
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 Entry Pocket	1	0	1	1	0	1	0	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Fashion Way			Fashion Way		
Base Volume Input [veh/h]	54	1979	194	184	1941	53	84	0	105	158	17	149
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
Proportion of CAVs [%]	0.00											
Growth 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
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]	54	1979	194	184	1941	53	84	0	105	158	17	149
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]	14	495	49	46	485	13	21	0	26	40	4	37
Total Analysis Volume [veh/h]	54	1979	194	184	1941	53	84	0	105	158	17	149
Presence of On-Street Parking	No		No	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]	105
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Permiss	Overlap	Split	Split	Overlap
Signal Group	1	6	0	5	2	0	8	8	8	0	4	4
Auxiliary Signal Groups									1,8			4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lag	-	-	-	-	-
Minimum Green [s]	6	6	0	6	6	0	6	6	6	0	6	6
Maximum Green [s]	30	30	0	30	30	0	30	30	30	0	30	30
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	0.0	3.0	3.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	0.0	1.0	1.0
Split [s]	10	57	0	22	69	0	13	13	13	0	13	13
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	0.0	3.0	3.0
Walk [s]	0	7	0	0	7	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	18	0	0	14	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No		No				No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	0.0	2.0	2.0
Minimum Recall	No	No		No	No		No		No		No	No
Maximum Recall	No	No		No	No		No		No		No	No
Pedestrian Recall	No	No		No	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	R	L	C	R	L	R	L	C	R
C, Cycle Length [s]	105	105	105	105	105	105	105	105	105	105	105
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	0.00
g_i, Effective Green Time [s]	6	61	61	10	65	65	9	19	9	9	36
g / C, Green / Cycle	0.06	0.58	0.58	0.09	0.62	0.62	0.08	0.18	0.09	0.09	0.34
(v / s)_i Volume / Saturation Flow Rate	0.02	0.29	0.12	0.05	0.29	0.03	0.07	0.07	0.05	0.05	0.09
s, saturation flow rate [veh/h]	3459	6792	1589	3459	6792	1589	1238	1589	1781	1797	1589
c, Capacity [veh/h]	198	3967	929	323	4212	986	147	286	153	154	540
d1, Uniform Delay [s]	47.40	12.82	10.34	45.59	10.61	7.84	49.41	37.84	46.14	46.14	25.27
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	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	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.73	0.45	0.51	1.58	0.36	0.10	3.47	0.79	3.31	3.28	0.27
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	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	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	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.27	0.50	0.21	0.57	0.46	0.05	0.57	0.37	0.57	0.57	0.28
d, Delay for Lane Group [s/veh]	48.14	13.27	10.85	47.17	10.97	7.94	52.88	38.63	49.45	49.41	25.54
Lane Group LOS	D	B	B	D	B	A	D	D	D	D	C
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.70	6.59	2.18	2.36	5.68	0.48	2.34	2.43	2.32	2.34	2.73
50th-Percentile Queue Length [ft/ln]	17.38	164.69	54.44	59.03	142.10	11.96	58.56	60.67	58.00	58.44	68.30
95th-Percentile Queue Length [veh/ln]	1.25	10.80	3.92	4.25	9.59	0.86	4.22	4.37	4.18	4.21	4.92
95th-Percentile Queue Length [ft/ln]	31.29	269.92	97.99	106.25	239.85	21.53	105.40	109.21	104.39	105.19	122.95

Movement, Approach, & Intersection Results

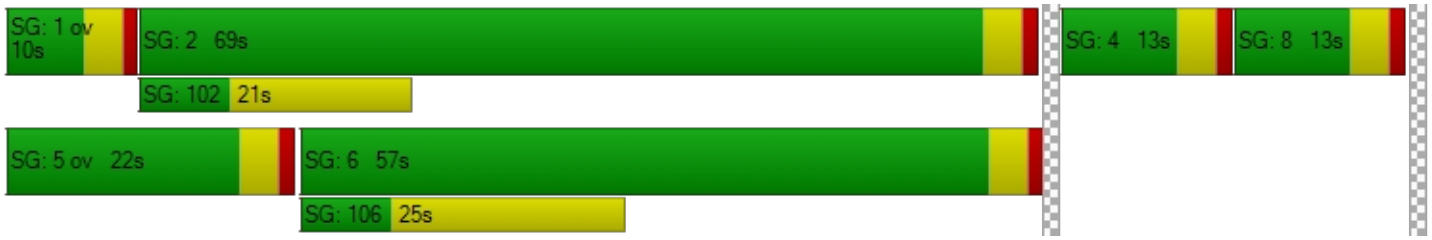
d_M, Delay for Movement [s/veh]	48.14	13.27	10.85	47.17	10.97	7.94	52.88	0.00	38.63	49.44	49.41	25.54
Movement LOS	D	B	B	D	B	A	D		D	D	D	C
d_A, Approach Delay [s/veh]	13.90			13.95			44.96			38.45		
Approach LOS	B			B			D			D		
d_I, Intersection Delay [s/veh]	16.74											
Intersection LOS	B											
Intersection V/C	0.585											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	11.0	11.0
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	42.08	42.08
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.215	2.444
Crosswalk LOS	F	F	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1009	1238	171	171
d_b, Bicycle Delay [s]	12.88	7.62	43.89	43.89
l_b,int, Bicycle LOS Score for Intersection	2.478	2.458	1.560	2.094
Bicycle LOS	B	B	A	B

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Hawthorne Boulevard at Carson Street

Control Type:	Signalized	Delay (sec / veh):	30.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.760

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Carson Street			Carson 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 Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Carson Street			Carson Street		
Base Volume Input [veh/h]	102	2102	288	311	1821	50	125	530	93	254	435	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
Proportion of CAVs [%]	0.00											
Growth 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
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]	102	2102	288	311	1821	50	125	530	93	254	435	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]	26	526	72	78	455	13	31	133	23	64	109	51
Total Analysis Volume [veh/h]	102	2102	288	311	1821	50	125	530	93	254	435	202
Presence of On-Street Parking	No		No	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]	105
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	6	6	0	6	6	0	6	6	0	6	6	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	11	39	0	15	43	0	19	38	0	13	32	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	28	0	0	24	0	0	21	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	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	R	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	105	105	105	105	105	105	105	105	105	105	105	105
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	7	48	48	11	52	52	9	21	21	9	21	21
g / C, Green / Cycle	0.07	0.46	0.46	0.11	0.50	0.50	0.09	0.20	0.20	0.09	0.20	0.20
(v / s)_i Volume / Saturation Flow Rate	0.06	0.31	0.18	0.09	0.27	0.27	0.07	0.17	0.17	0.07	0.09	0.13
s, saturation flow rate [veh/h]	1781	6792	1589	3459	5094	1837	1781	1870	1774	3459	5094	1589
c, Capacity [veh/h]	120	3110	728	364	2525	911	156	371	352	299	1004	313
d1, Uniform Delay [s]	48.49	22.37	18.87	46.23	18.31	18.31	47.06	40.75	40.77	47.35	37.05	38.82
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	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	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	14.94	1.20	1.61	5.72	0.85	2.34	9.14	5.99	6.45	6.71	0.30	2.22
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	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	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	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.85	0.68	0.40	0.85	0.54	0.54	0.80	0.86	0.86	0.85	0.43	0.64
d, Delay for Lane Group [s/veh]	63.43	23.57	20.48	51.95	19.15	20.64	56.20	46.73	47.22	54.06	37.35	41.05
Lane Group LOS	E	C	C	D	B	C	E	D	D	D	D	D
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.13	10.09	4.87	4.26	7.61	8.61	3.59	8.52	8.15	3.54	3.29	4.95
50th-Percentile Queue Length [ft/ln]	78.31	252.16	121.69	106.49	190.23	215.32	89.74	212.94	203.77	88.48	82.16	123.75
95th-Percentile Queue Length [veh/ln]	5.64	15.30	8.49	7.64	12.13	13.43	6.46	13.30	12.83	6.37	5.92	8.60
95th-Percentile Queue Length [ft/ln]	140.95	382.38	212.15	191.10	303.32	335.65	161.53	332.60	320.82	159.26	147.88	214.97

Movement, Approach, & Intersection Results

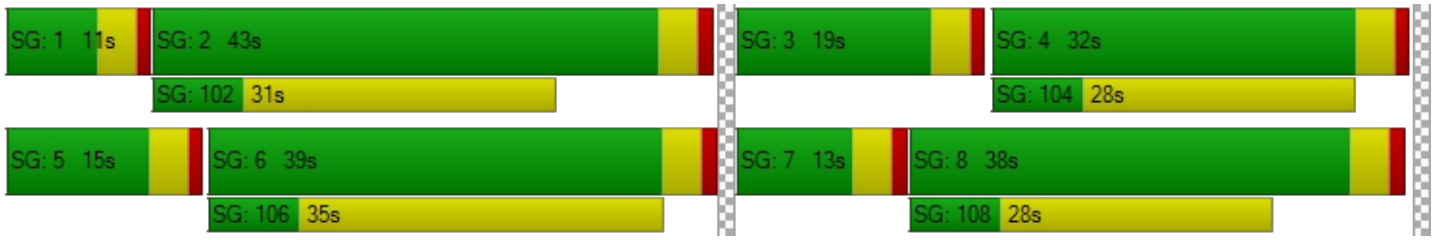
d_M, Delay for Movement [s/veh]	63.43	23.57	20.48	51.95	19.52	20.64	56.20	46.92	47.22	54.06	37.35	41.05
Movement LOS	E	C	C	D	B	C	E	D	D	D	D	D
d_A, Approach Delay [s/veh]	24.85			24.17			48.51			42.95		
Approach LOS	C			C			D			D		
d_I, Intersection Delay [s/veh]	29.97											
Intersection LOS	C											
Intersection V/C	0.760											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	42.11	42.11	42.11	42.11
l_p,int, Pedestrian LOS Score for Intersection	3.428	3.423	2.677	2.979
Crosswalk LOS	C	C	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	666	742	647	533
d_b, Bicycle Delay [s]	23.36	20.77	24.03	28.26
l_b,int, Bicycle LOS Score for Intersection	2.588	2.460	2.177	2.050
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 21: Hawthorne Boulevard at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	47.0
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.810

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Sepulveda Boulevard			Sepulveda Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Sepulveda Boulevard			Sepulveda Boulevard		
Base Volume Input [veh/h]	239	1820	633	286	1718	230	268	942	117	528	797	206
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
Proportion of CAVs [%]	0.00											
Growth 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
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]	239	1820	633	286	1718	230	268	942	117	528	797	206
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]	60	455	158	72	430	58	67	236	29	132	199	52
Total Analysis Volume [veh/h]	239	1820	633	286	1718	230	268	942	117	528	797	206
Presence of On-Street Parking	No		No	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]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Unsigna	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	6	6	0	6	6	0	6	6	0	6	6	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	14	42	0	13	41	0	18	46	0	19	47	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	31	0	0	28	0	0	35	0	0	35	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	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	L	C	R	L	C	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	10	52	9	51	51	11	28	28	15	31	31
g / C, Green / Cycle	0.08	0.44	0.08	0.43	0.43	0.09	0.23	0.23	0.13	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.07	0.27	0.08	0.25	0.14	0.08	0.20	0.20	0.15	0.16	0.13
s, saturation flow rate [veh/h]	3459	6792	3459	6792	1589	3459	3560	1766	3459	5094	1589
c, Capacity [veh/h]	290	2959	262	2903	679	329	819	406	434	1326	414
d1, Uniform Delay [s]	54.12	26.11	55.49	26.34	23.01	53.29	44.43	44.44	52.50	38.94	37.74
k, delay calibration	0.11	0.50	0.11	0.50	0.50	0.11	0.11	0.14	0.11	0.11	0.11
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
d2, Incremental Delay [s]	5.81	0.97	55.18	0.89	1.35	4.93	2.90	7.24	102.53	0.44	0.93
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	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	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	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.82	0.61	1.09	0.59	0.34	0.82	0.86	0.86	1.22	0.60	0.50
d, Delay for Lane Group [s/veh]	59.93	27.08	110.67	27.24	24.36	58.22	47.33	51.67	155.03	39.38	38.67
Lane Group LOS	E	C	F	C	C	E	D	D	F	D	D
Critical Lane Group	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.79	10.09	5.96	9.49	4.61	4.19	10.40	10.81	12.70	6.91	5.26
50th-Percentile Queue Length [ft/ln]	94.66	252.17	149.00	237.15	115.18	104.75	259.94	270.27	317.38	172.85	131.55
95th-Percentile Queue Length [veh/ln]	6.82	15.30	10.26	14.54	8.13	7.54	15.69	16.20	20.06	11.23	9.02
95th-Percentile Queue Length [ft/ln]	170.39	382.38	256.39	363.43	203.19	188.55	392.14	405.07	501.52	280.66	225.59

Movement, Approach, & Intersection Results

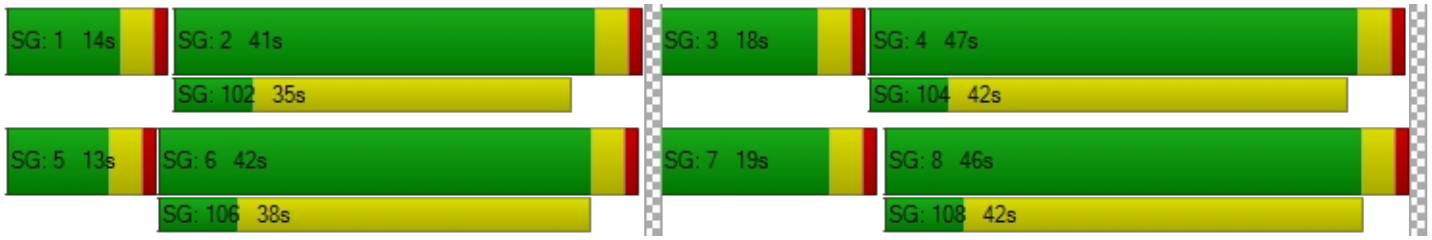
d_M, Delay for Movement [s/veh]	59.93	27.08	0.00	110.67	27.24	24.36	58.22	48.41	51.67	155.03	39.38	38.67
Movement LOS	E	C		F	C	C	E	D	D	F	D	D
d_A, Approach Delay [s/veh]	30.89			37.62			50.68			79.17		
Approach LOS	C			D			D			E		
d_I, Intersection Delay [s/veh]	47.00											
Intersection LOS	D											
Intersection V/C	0.810											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	49.52	49.52	49.52	49.52
l_p,int, Pedestrian LOS Score for Intersection	3.484	3.493	3.055	3.162
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	633	617	700	716
d_b, Bicycle Delay [s]	28.03	28.72	25.36	24.72
l_b,int, Bicycle LOS Score for Intersection	2.409	2.481	2.289	2.402
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 27: Western Avenue at Carson Street

Control Type:	Signalized	Delay (sec / veh):	29.4
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.780

Intersection Setup

Name	Western Avenue			Western Avenue			Carson Street			Carson 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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Western Avenue			Western Avenue			Carson Street			Carson Street		
Base Volume Input [veh/h]	126	794	160	208	1047	179	58	1014	126	63	842	103
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
Proportion of CAVs [%]	0.00											
Growth 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
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]	126	794	160	208	1047	179	58	1014	126	63	842	103
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]	32	199	40	52	262	45	15	254	32	16	211	26
Total Analysis Volume [veh/h]	126	794	160	208	1047	179	58	1014	126	63	842	103
Presence of On-Street Parking	No		No	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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
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	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	6	6	0	6	6	0	0	6	0	0	6	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	12	29	0	23	40	0	0	38	0	0	38	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	18	0	0	18	0	0	21	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	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	R	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	8	32	32	12	36	36	34	34	34	34	34	34
g / C, Green / Cycle	0.09	0.35	0.35	0.14	0.40	0.40	0.38	0.38	0.38	0.38	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.07	0.22	0.10	0.12	0.29	0.11	0.10	0.31	0.31	0.13	0.26	0.26
s, saturation flow rate [veh/h]	1781	3560	1589	1781	3560	1589	593	1870	1799	493	1870	1799
c, Capacity [veh/h]	159	1248	557	248	1426	637	160	705	678	114	705	678
d1, Uniform Delay [s]	40.20	24.46	21.13	37.78	22.94	18.25	37.31	25.35	25.38	43.33	23.55	23.55
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.33	0.33	0.11	0.22	0.22
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
d2, Incremental Delay [s]	8.54	2.49	1.30	7.38	3.39	1.10	1.37	7.10	7.46	4.09	2.39	2.49
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	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	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	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.79	0.64	0.29	0.84	0.73	0.28	0.36	0.82	0.83	0.55	0.68	0.68
d, Delay for Lane Group [s/veh]	48.74	26.95	22.43	45.16	26.33	19.35	38.68	32.46	32.84	47.43	25.94	26.03
Lane Group LOS	D	C	C	D	C	B	D	C	C	D	C	C
Critical Lane Group	Yes	No	No	No	Yes	No	No	No	Yes	No	No	No
50th-Percentile Queue Length [veh/ln]	3.08	7.26	2.58	4.90	9.65	2.64	1.27	12.07	11.71	1.52	8.70	8.39
50th-Percentile Queue Length [ft/ln]	76.94	181.43	64.44	122.57	241.19	65.91	31.63	301.84	292.76	38.10	217.48	209.72
95th-Percentile Queue Length [veh/ln]	5.54	11.68	4.64	8.53	14.74	4.75	2.28	17.77	17.32	2.74	13.54	13.14
95th-Percentile Queue Length [ft/ln]	138.49	291.88	115.99	213.35	368.53	118.64	56.93	444.30	433.07	68.59	338.40	328.47

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	48.74	26.95	22.43	45.16	26.33	19.35	38.68	32.62	32.84	47.43	25.98	26.03
Movement LOS	D	C	C	D	C	B	D	C	C	D	C	C
d_A, Approach Delay [s/veh]	28.82			28.19			32.94			27.33		
Approach LOS	C			C			C			C		
d_I, Intersection Delay [s/veh]	29.35											
Intersection LOS	C											
Intersection V/C	0.780											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	34.70	34.70	34.70	34.70
l_p,int, Pedestrian LOS Score for Intersection	2.918	2.923	2.757	2.765
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	555	800	755	755
d_b, Bicycle Delay [s]	23.49	16.22	17.44	17.44
l_b,int, Bicycle LOS Score for Intersection	2.451	2.743	2.548	2.391
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



APPENDIX C-II

EXISTING WITH AMBIENT GROWTH (YEAR 2028) TRAFFIC CONDITIONS

Intersection Level Of Service Report
Intersection 1: I-405 NB On-Ramp at Redondo Beach Boulevard

Control Type:	Two-way stop	Delay (sec / veh):	13.3
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.207

Intersection Setup

Name	I-405 NB On-Ramp		Redondo Beach Boulevard		Redondo Beach Boulevard	
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 Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	I-405 NB On-Ramp		Redondo Beach Boulevard		Redondo Beach Boulevard	
Base Volume Input [veh/h]	0	0	113	902	636	629
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	0	0	113	902	636	629
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]	0	0	28	226	159	157
Total Analysis Volume [veh/h]	0	0	113	902	636	629
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			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.21	0.01	0.01	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	13.32	0.00	0.00	0.00
Movement LOS			B	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.77	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	19.33	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		1.48		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.66					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 8: Hawthorne Boulevard at Torrance Boulevard

Control Type:	Signalized	Delay (sec / veh):	35.2
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.622

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Torrance Boulevard			Torrance Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Torrance Boulevard			Torrance Boulevard		
Base Volume Input [veh/h]	220	1116	146	145	1476	214	240	761	141	333	960	150
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
Proportion of CAVs [%]	0.00											
Growth 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
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]	220	1116	146	145	1476	214	240	761	141	333	960	150
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]	55	279	37	36	369	54	60	190	35	83	240	38
Total Analysis Volume [veh/h]	220	1116	146	145	1476	214	240	761	141	333	960	150
Presence of On-Street Parking	No		No	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]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	6	6	0	6	6	0	6	6	0	6	6	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	12	43	0	11	42	0	16	49	0	17	50	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	31	0	0	31	0	0	38	0	0	38	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	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	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	8	59	59	7	58	58	10	25	25	13	27	27
g / C, Green / Cycle	0.07	0.50	0.50	0.06	0.49	0.49	0.09	0.20	0.20	0.11	0.23	0.23
(v / s)_i Volume / Saturation Flow Rate	0.06	0.16	0.09	0.04	0.22	0.13	0.07	0.15	0.09	0.10	0.19	0.09
s, saturation flow rate [veh/h]	3459	6792	1589	3459	6792	1589	3459	5094	1589	3459	5094	1589
c, Capacity [veh/h]	233	3362	787	201	3299	772	299	1043	326	376	1158	361
d1, Uniform Delay [s]	55.76	18.32	16.86	55.58	20.28	18.35	53.84	44.63	41.65	52.76	44.17	39.58
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	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	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	16.93	0.27	0.52	4.82	0.44	0.89	5.03	1.00	0.91	6.99	1.60	0.76
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	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	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	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.94	0.33	0.19	0.72	0.45	0.28	0.80	0.73	0.43	0.88	0.83	0.42
d, Delay for Lane Group [s/veh]	72.70	18.59	17.38	60.40	20.72	19.24	58.87	45.62	42.56	59.74	45.77	40.35
Lane Group LOS	E	B	B	E	C	B	E	D	D	E	D	D
Critical Lane Group	Yes	No	No	No	Yes	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	3.86	4.71	2.35	2.29	6.81	3.71	3.77	7.14	3.74	5.31	9.20	3.87
50th-Percentile Queue Length [ft/ln]	96.58	117.83	58.84	57.34	170.35	92.81	94.14	178.61	93.47	132.74	229.88	96.67
95th-Percentile Queue Length [veh/ln]	6.95	8.27	4.24	4.13	11.10	6.68	6.78	11.53	6.73	9.09	14.17	6.96
95th-Percentile Queue Length [ft/ln]	173.85	206.84	105.91	103.21	277.38	167.06	169.46	288.20	168.25	227.22	354.21	174.01

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	72.70	18.59	17.38	60.40	20.72	19.24	58.87	45.62	42.56	59.74	45.77	40.35
Movement LOS	E	B	B	E	C	B	E	D	D	E	D	D
d_A, Approach Delay [s/veh]	26.50			23.69			48.03			48.43		
Approach LOS	C			C			D			D		
d_I, Intersection Delay [s/veh]	35.15											
Intersection LOS	D											
Intersection V/C	0.622											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	49.52	49.52	49.52	49.52
l_p,int, Pedestrian LOS Score for Intersection	3.396	3.388	3.138	3.133
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	650	633	750	766
d_b, Bicycle Delay [s]	27.35	28.03	23.45	22.83
l_b,int, Bicycle LOS Score for Intersection	2.171	2.317	2.188	2.353
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 12: Hawthorne Boulevard at Fashion Way

Control Type:	Signalized	Delay (sec / veh):	10.8
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.421

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Fashion Way			Fashion Way		
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 Entry Pocket	1	0	1	1	0	1	0	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Fashion Way			Fashion Way		
Base Volume Input [veh/h]	64	1359	87	70	1828	74	41	0	42	53	26	60
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
Proportion of CAVs [%]	0.00											
Growth 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
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]	64	1359	87	70	1828	74	41	0	42	53	26	60
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]	16	340	22	18	457	19	10	0	11	13	7	15
Total Analysis Volume [veh/h]	64	1359	87	70	1828	74	41	0	42	53	26	60
Presence of On-Street Parking	No		No	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]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Permiss	Overlap	Split	Split	Overlap
Signal Group	1	6	0	5	2	0	8	8	8	0	4	4
Auxiliary Signal Groups									1,8			4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lag	-	-	-	-	-
Minimum Green [s]	6	6	0	6	6	0	6	6	6	0	6	6
Maximum Green [s]	30	30	0	30	30	0	30	30	30	0	30	30
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	0.0	3.0	3.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	0.0	1.0	1.0
Split [s]	10	54	0	26	70	0	10	10	10	0	10	10
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	0.0	3.0	3.0
Walk [s]	0	7	0	0	7	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	18	0	0	14	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No		No				No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	0.0	2.0	2.0
Minimum Recall	No	No		No	No		No		No		No	No
Maximum Recall	No	No		No	No		No		No		No	No
Pedestrian Recall	No	No		No	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	R	L	C	R	L	R	L	C	R
C, Cycle Length [s]	100	100	100	100	100	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	0.00
g_i, Effective Green Time [s]	5	67	67	5	67	67	6	15	6	6	25
g / C, Green / Cycle	0.05	0.67	0.67	0.05	0.67	0.67	0.06	0.15	0.06	0.06	0.25
(v / s)_i Volume / Saturation Flow Rate	0.02	0.20	0.05	0.02	0.27	0.05	0.03	0.03	0.02	0.02	0.04
s, saturation flow rate [veh/h]	3459	6792	1589	3459	6792	1589	1342	1589	1781	1838	1589
c, Capacity [veh/h]	173	4551	1065	179	4561	1067	122	238	105	108	397
d1, Uniform Delay [s]	45.98	6.81	5.76	45.91	7.38	5.66	47.83	37.16	45.29	45.27	29.24
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	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	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.31	0.17	0.15	1.39	0.26	0.13	1.61	0.35	2.19	2.07	0.17
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	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	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	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.37	0.30	0.08	0.39	0.40	0.07	0.34	0.18	0.37	0.37	0.15
d, Delay for Lane Group [s/veh]	47.28	6.98	5.91	47.30	7.64	5.78	49.43	37.51	47.48	47.34	29.41
Lane Group LOS	D	A	A	D	A	A	D	D	D	D	C
Critical Lane Group	Yes	No	No	No	Yes	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.80	2.73	0.62	0.87	4.00	0.52	1.06	0.92	1.00	1.01	1.14
50th-Percentile Queue Length [ft/ln]	19.95	68.22	15.61	21.82	99.89	13.07	26.57	22.93	24.90	25.22	28.44
95th-Percentile Queue Length [veh/ln]	1.44	4.91	1.12	1.57	7.19	0.94	1.91	1.65	1.79	1.82	2.05
95th-Percentile Queue Length [ft/ln]	35.91	122.80	28.09	39.28	179.81	23.53	47.82	41.28	44.82	45.40	51.19

Movement, Approach, & Intersection Results

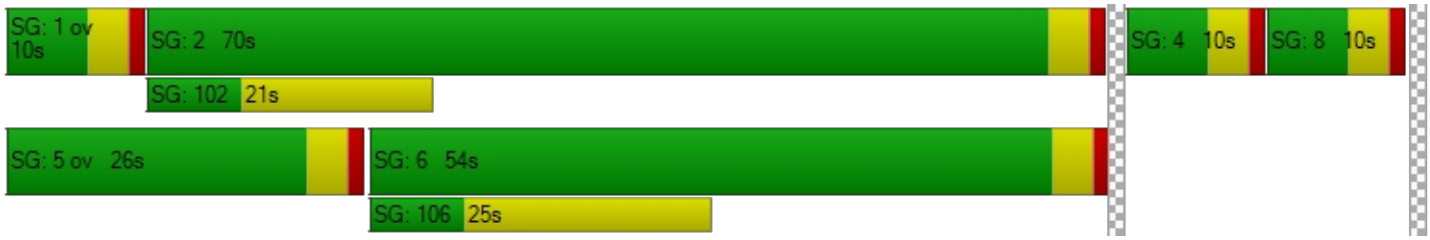
d_M, Delay for Movement [s/veh]	47.28	6.98	5.91	47.30	7.64	5.78	49.43	0.00	37.51	47.44	47.34	29.41
Movement LOS	D	A	A	D	A	A	D		D	D	D	C
d_A, Approach Delay [s/veh]	8.62			8.98			43.40			39.64		
Approach LOS	A			A			D			D		
d_I, Intersection Delay [s/veh]	10.76											
Intersection LOS	B											
Intersection V/C	0.421											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	11.0	11.0
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	39.61	39.61
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.196	2.362
Crosswalk LOS	F	F	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1000	1320	120	120
d_b, Bicycle Delay [s]	12.51	5.78	44.19	44.19
l_b,int, Bicycle LOS Score for Intersection	2.182	2.373	1.560	1.789
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Hawthorne Boulevard at Carson Street

Control Type:	Signalized	Delay (sec / veh):	25.7
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.651

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Carson Street			Carson 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 Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Carson Street			Carson Street		
Base Volume Input [veh/h]	113	1355	144	126	1651	68	65	465	70	287	545	147
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
Proportion of CAVs [%]	0.00											
Growth 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
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]	113	1355	144	126	1651	68	65	465	70	287	545	147
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]	28	339	36	32	413	17	16	116	18	72	136	37
Total Analysis Volume [veh/h]	113	1355	144	126	1651	68	65	465	70	287	545	147
Presence of On-Street Parking	No		No	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]	95
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	6	6	0	6	6	0	6	6	0	6	6	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	12	39	0	10	37	0	11	32	0	14	35	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	28	0	0	24	0	0	21	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	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	R	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	95	95	95	95	95	95	95	95	95	95	95	95
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	8	47	47	6	45	45	5	17	17	10	21	21
g / C, Green / Cycle	0.08	0.49	0.49	0.06	0.47	0.47	0.05	0.17	0.17	0.10	0.23	0.23
(v / s)_i Volume / Saturation Flow Rate	0.06	0.20	0.09	0.04	0.25	0.25	0.04	0.15	0.15	0.08	0.11	0.09
s, saturation flow rate [veh/h]	1781	6792	1589	3459	5094	1822	1781	1870	1786	3459	5094	1589
c, Capacity [veh/h]	143	3336	781	214	2408	861	94	328	313	358	1150	359
d1, Uniform Delay [s]	42.96	15.39	13.54	43.46	17.61	17.61	44.29	37.89	37.93	41.70	31.93	31.42
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	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	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.27	0.37	0.52	2.57	0.83	2.29	8.61	5.48	5.93	4.20	0.30	0.75
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	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	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	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.79	0.41	0.18	0.59	0.53	0.53	0.69	0.83	0.84	0.80	0.47	0.41
d, Delay for Lane Group [s/veh]	52.24	15.76	14.07	46.03	18.43	19.90	52.90	43.37	43.86	45.90	32.24	32.17
Lane Group LOS	D	B	B	D	B	B	D	D	D	D	C	C
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.95	4.54	1.78	1.51	6.37	7.18	1.72	6.54	6.33	3.46	3.61	2.92
50th-Percentile Queue Length [ft/ln]	73.82	113.46	44.48	37.71	159.20	179.60	42.99	163.43	158.17	86.61	90.16	73.02
95th-Percentile Queue Length [veh/ln]	5.32	8.03	3.20	2.72	10.51	11.58	3.10	10.73	10.45	6.24	6.49	5.26
95th-Percentile Queue Length [ft/ln]	132.88	200.80	80.06	67.89	262.66	289.49	77.38	268.26	261.30	155.90	162.30	131.43

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	52.24	15.76	14.07	46.03	18.78	19.90	52.90	43.57	43.86	45.90	32.24	32.17
Movement LOS	D	B	B	D	B	B	D	D	D	D	C	C
d_A, Approach Delay [s/veh]	18.16			20.68			44.62			36.23		
Approach LOS	B			C			D			D		
d_I, Intersection Delay [s/veh]	25.75											
Intersection LOS	C											
Intersection V/C	0.651											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	37.18	37.18	37.18	37.18
l_p,int, Pedestrian LOS Score for Intersection	3.322	3.301	2.671	2.937
Crosswalk LOS	C	C	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	736	694	589	652
d_b, Bicycle Delay [s]	18.98	20.27	23.66	21.59
l_b,int, Bicycle LOS Score for Intersection	2.225	2.321	2.055	2.098
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 21: Hawthorne Boulevard at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	40.1
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.721

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Sepulveda Boulevard			Sepulveda Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Sepulveda Boulevard			Sepulveda Boulevard		
Base Volume Input [veh/h]	123	1336	400	115	1732	202	229	817	79	575	1080	201
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
Proportion of CAVs [%]	0.00											
Growth 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
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]	123	1336	400	115	1732	202	229	817	79	575	1080	201
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]	31	334	100	29	433	51	57	204	20	144	270	50
Total Analysis Volume [veh/h]	123	1336	400	115	1732	202	229	817	79	575	1080	201
Presence of On-Street Parking	No		No	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]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Unsigna	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	6	6	0	6	6	0	6	6	0	6	6	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	10	42	0	10	42	0	13	46	0	22	55	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	31	0	0	28	0	0	35	0	0	35	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	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	L	C	R	L	C	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	6	56	6	56	56	9	24	24	18	33	33
g / C, Green / Cycle	0.05	0.47	0.05	0.47	0.47	0.08	0.20	0.20	0.15	0.27	0.27
(v / s)_i Volume / Saturation Flow Rate	0.04	0.20	0.03	0.26	0.13	0.07	0.17	0.17	0.17	0.21	0.13
s, saturation flow rate [veh/h]	3459	6792	3459	6792	1589	3459	3560	1787	3459	5094	1589
c, Capacity [veh/h]	176	3192	172	3185	745	262	701	352	520	1383	431
d1, Uniform Delay [s]	56.09	21.00	56.08	22.73	19.40	54.93	46.52	46.54	51.01	40.44	36.48
k, delay calibration	0.11	0.50	0.11	0.50	0.50	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	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.00	0.41	4.44	0.67	0.90	8.99	3.03	5.89	54.55	0.99	0.78
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	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	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	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.70	0.42	0.67	0.54	0.27	0.88	0.85	0.85	1.11	0.78	0.47
d, Delay for Lane Group [s/veh]	61.09	21.40	60.52	23.40	20.29	63.92	49.55	52.43	105.56	41.43	37.26
Lane Group LOS	E	C	E	C	C	E	D	D	F	D	D
Critical Lane Group	Yes	No	No	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.96	6.23	1.82	8.75	3.61	3.75	8.85	9.19	11.72	9.91	5.02
50th-Percentile Queue Length [ft/ln]	48.93	155.75	45.50	218.81	90.27	93.84	221.29	229.70	293.12	247.68	125.49
95th-Percentile Queue Length [veh/ln]	3.52	10.32	3.28	13.60	6.50	6.76	13.73	14.16	18.15	15.07	8.69
95th-Percentile Queue Length [ft/ln]	88.07	258.08	81.89	340.10	162.49	168.91	343.27	353.97	453.75	376.72	217.34

Movement, Approach, & Intersection Results

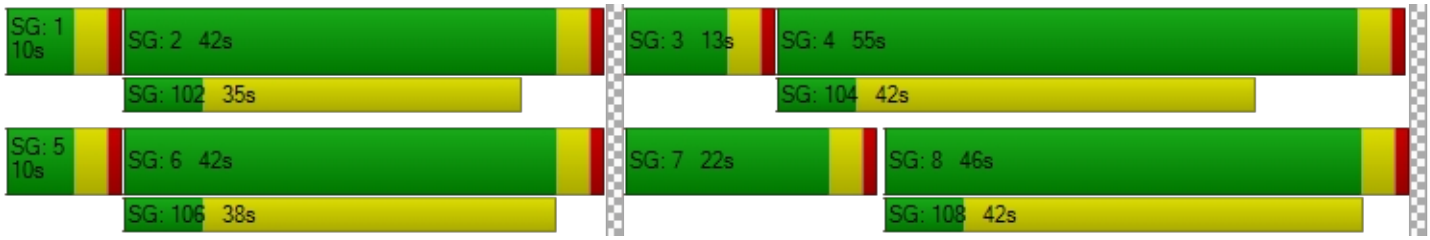
d_M, Delay for Movement [s/veh]	61.09	21.40	0.00	60.52	23.40	20.29	63.92	50.33	52.43	105.56	41.43	37.26
Movement LOS	E	C		E	C	C	E	D	D	F	D	D
d_A, Approach Delay [s/veh]	24.75			25.18			53.24			60.85		
Approach LOS	C			C			D			E		
d_I, Intersection Delay [s/veh]	40.15											
Intersection LOS	D											
Intersection V/C	0.721											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	49.52	49.52	49.52	49.52
l_p,int, Pedestrian LOS Score for Intersection	3.433	3.430	3.048	3.165
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	633	633	700	850
d_b, Bicycle Delay [s]	28.03	28.03	25.36	19.85
l_b,int, Bicycle LOS Score for Intersection	2.161	2.405	2.178	2.580
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 27: Western Avenue at Carson Street

Control Type:	Signalized	Delay (sec / veh):	27.6
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.782

Intersection Setup

Name	Western Avenue			Western Avenue			Carson Street			Carson 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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Western Avenue			Western Avenue			Carson Street			Carson Street		
Base Volume Input [veh/h]	159	1065	115	68	757	144	55	617	112	102	1123	126
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
Proportion of CAVs [%]	0.00											
Growth 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
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]	159	1065	115	68	757	144	55	617	112	102	1123	126
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]	40	266	29	17	189	36	14	154	28	26	281	32
Total Analysis Volume [veh/h]	159	1065	115	68	757	144	55	617	112	102	1123	126
Presence of On-Street Parking	No		No	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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
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	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	6	6	0	6	6	0	0	6	0	0	6	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	19	38	0	10	29	0	0	42	0	0	42	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	18	0	0	18	0	0	21	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	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	R	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	10	35	35	5	30	30	38	38	38	38	38	38
g / C, Green / Cycle	0.11	0.39	0.39	0.06	0.34	0.34	0.42	0.42	0.42	0.42	0.42	0.42
(v / s)_i Volume / Saturation Flow Rate	0.09	0.30	0.07	0.04	0.21	0.09	0.12	0.20	0.20	0.14	0.34	0.34
s, saturation flow rate [veh/h]	1781	3560	1589	1781	3560	1589	445	1870	1771	726	1870	1805
c, Capacity [veh/h]	195	1387	619	99	1195	533	122	788	747	262	788	761
d1, Uniform Delay [s]	39.19	23.93	18.08	41.75	25.24	21.86	41.70	18.84	18.85	29.37	22.80	22.86
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.31	0.32
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
d2, Incremental Delay [s]	7.95	4.12	0.66	8.13	2.56	1.24	2.56	0.44	0.47	0.94	5.55	5.94
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	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	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	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.81	0.77	0.19	0.69	0.63	0.27	0.45	0.47	0.48	0.39	0.80	0.81
d, Delay for Lane Group [s/veh]	47.14	28.05	18.74	49.88	27.81	23.10	44.26	19.28	19.32	30.30	28.35	28.80
Lane Group LOS	D	C	B	D	C	C	D	B	B	C	C	C
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.82	10.20	1.65	1.69	7.03	2.36	1.30	5.51	5.24	1.95	12.32	12.05
50th-Percentile Queue Length [ft/ln]	95.41	254.91	41.20	42.26	175.67	58.97	32.60	137.71	130.90	48.68	307.89	301.34
95th-Percentile Queue Length [veh/ln]	6.87	15.43	2.97	3.04	11.37	4.25	2.35	9.36	8.99	3.50	18.07	17.75
95th-Percentile Queue Length [ft/ln]	171.74	385.83	74.16	76.06	284.36	106.14	58.67	233.93	224.72	87.62	451.78	443.69

Movement, Approach, & Intersection Results

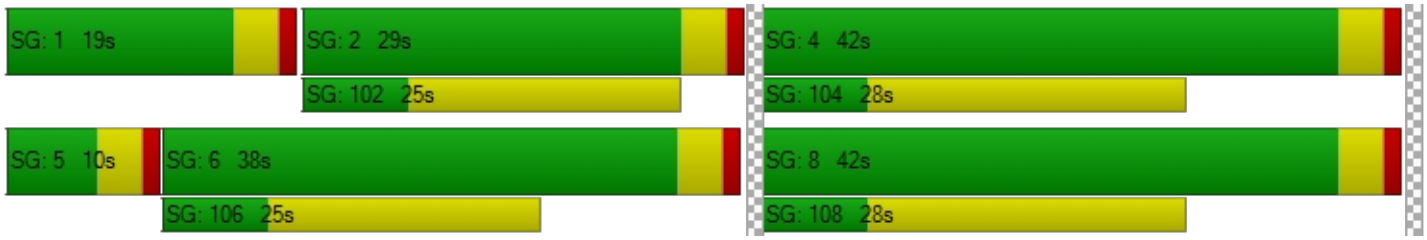
d_M, Delay for Movement [s/veh]	47.14	28.05	18.74	49.88	27.81	23.10	44.26	19.30	19.32	30.30	28.55	28.80
Movement LOS	D	C	B	D	C	C	D	B	B	C	C	C
d_A, Approach Delay [s/veh]	29.52			28.66			21.05			28.70		
Approach LOS	C			C			C			C		
d_I, Intersection Delay [s/veh]	27.59											
Intersection LOS	C											
Intersection V/C	0.782											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	34.68	34.68	34.68	34.68
l_p,int, Pedestrian LOS Score for Intersection	2.973	2.891	2.730	2.719
Crosswalk LOS	C	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	755	555	844	844
d_b, Bicycle Delay [s]	17.43	23.48	15.03	15.03
l_b,int, Bicycle LOS Score for Intersection	2.664	2.359	2.206	2.674
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 1: I-405 NB On-Ramp at Redondo Beach Boulevard

Control Type:	Two-way stop	Delay (sec / veh):	18.8
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.533

Intersection Setup

Name	I-405 NB On-Ramp		Redondo Beach Boulevard		Redondo Beach Boulevard	
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 Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	I-405 NB On-Ramp		Redondo Beach Boulevard		Redondo Beach Boulevard	
Base Volume Input [veh/h]	0	0	293	1363	658	598
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	0	0	293	1363	658	598
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]	0	0	73	341	165	150
Total Analysis Volume [veh/h]	0	0	293	1363	658	598
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			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.53	0.01	0.01	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	18.78	0.00	0.00	0.00
Movement LOS			C	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	3.12	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	78.05	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		3.32		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.89					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 8: Hawthorne Boulevard at Torrance Boulevard

Control Type:	Signalized	Delay (sec / veh):	37.6
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.709

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Torrance Boulevard			Torrance Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Torrance Boulevard			Torrance Boulevard		
Base Volume Input [veh/h]	272	1792	281	199	1534	183	255	951	305	349	821	189
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
Proportion of CAVs [%]	0.00											
Growth 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
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]	272	1792	281	199	1534	183	255	951	305	349	821	189
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]	68	448	70	50	384	46	64	238	76	87	205	47
Total Analysis Volume [veh/h]	272	1792	281	199	1534	183	255	951	305	349	821	189
Presence of On-Street Parking	No		No	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]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	6	6	0	6	6	0	6	6	0	6	6	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	13	43	0	12	42	0	15	49	0	16	50	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	31	0	0	31	0	0	38	0	0	38	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	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	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	9	56	56	8	55	55	11	28	28	12	29	29
g / C, Green / Cycle	0.08	0.47	0.47	0.07	0.46	0.46	0.09	0.23	0.23	0.10	0.24	0.24
(v / s)_i Volume / Saturation Flow Rate	0.08	0.26	0.18	0.06	0.23	0.12	0.07	0.19	0.19	0.10	0.16	0.12
s, saturation flow rate [veh/h]	3459	6792	1589	3459	6792	1589	3459	5094	1589	3459	5094	1589
c, Capacity [veh/h]	262	3162	740	233	3105	727	311	1189	371	348	1243	388
d1, Uniform Delay [s]	55.49	23.30	20.83	55.41	22.85	19.99	53.68	43.39	43.66	54.00	40.90	38.94
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	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	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	36.77	0.74	1.48	8.65	0.56	0.83	5.36	1.29	4.59	23.33	0.61	0.95
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	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	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	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.04	0.57	0.38	0.85	0.49	0.25	0.82	0.80	0.82	1.00	0.66	0.49
d, Delay for Lane Group [s/veh]	92.26	24.04	22.31	64.06	23.41	20.82	59.04	44.68	48.26	77.33	41.51	39.89
Lane Group LOS	F	C	C	E	C	C	E	D	D	F	D	D
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	5.29	9.24	5.40	3.26	7.65	3.31	4.01	8.98	9.03	6.37	7.35	4.89
50th-Percentile Queue Length [ft/ln]	132.27	230.98	134.89	81.49	191.19	82.74	100.31	224.56	225.83	159.19	183.84	122.28
95th-Percentile Queue Length [veh/ln]	9.18	14.22	9.20	5.87	12.18	5.96	7.22	13.90	13.96	10.52	11.80	8.52
95th-Percentile Queue Length [ft/ln]	229.48	355.61	230.12	146.68	304.57	148.93	180.56	347.44	349.06	263.02	295.02	212.96

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	92.26	24.04	22.31	64.06	23.41	20.82	59.04	44.68	48.26	77.33	41.51	39.89
Movement LOS	F	C	C	E	C	C	E	D	D	F	D	D
d_A, Approach Delay [s/veh]	31.74			27.38			47.82			50.48		
Approach LOS	C			C			D			D		
d_I, Intersection Delay [s/veh]	37.55											
Intersection LOS	D											
Intersection V/C	0.709											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	49.52	49.52	49.52	49.52
l_p,int, Pedestrian LOS Score for Intersection	3.494	3.460	3.165	3.165
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	650	633	750	766
d_b, Bicycle Delay [s]	27.35	28.03	23.45	22.83
l_b,int, Bicycle LOS Score for Intersection	2.527	2.350	2.391	2.307
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 12: Hawthorne Boulevard at Fashion Way

Control Type:	Signalized	Delay (sec / veh):	16.9
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.603

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Fashion Way			Fashion Way		
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 Entry Pocket	1	0	1	1	0	1	0	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Fashion Way			Fashion Way		
Base Volume Input [veh/h]	55	2021	198	188	1982	54	86	0	107	161	17	152
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
Proportion of CAVs [%]	0.00											
Growth 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
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]	55	2021	198	188	1982	54	86	0	107	161	17	152
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]	14	505	50	47	496	14	22	0	27	40	4	38
Total Analysis Volume [veh/h]	55	2021	198	188	1982	54	86	0	107	161	17	152
Presence of On-Street Parking	No		No	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]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Permiss	Overlap	Split	Split	Overlap
Signal Group	1	6	0	5	2	0	8	8	8	0	4	4
Auxiliary Signal Groups									1,8			4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lag	-	-	-	-	-
Minimum Green [s]	6	6	0	6	6	0	6	6	6	0	6	6
Maximum Green [s]	30	30	0	30	30	0	30	30	30	0	30	30
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	0.0	3.0	3.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	0.0	1.0	1.0
Split [s]	10	52	0	22	64	0	12	12	12	0	14	14
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	0.0	3.0	3.0
Walk [s]	0	7	0	0	7	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	18	0	0	14	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No		No				No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	0.0	2.0	2.0
Minimum Recall	No	No		No	No		No		No		No	No
Maximum Recall	No	No		No	No		No		No		No	No
Pedestrian Recall	No	No		No	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	R	L	C	R	L	R	L	C	R
C, Cycle Length [s]	100	100	100	100	100	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	0.00
g_i, Effective Green Time [s]	6	57	57	9	60	60	9	19	9	9	35
g / C, Green / Cycle	0.06	0.57	0.57	0.09	0.60	0.60	0.09	0.19	0.09	0.09	0.35
(v / s)_i Volume / Saturation Flow Rate	0.02	0.30	0.12	0.05	0.29	0.03	0.07	0.07	0.05	0.05	0.10
s, saturation flow rate [veh/h]	3459	6792	1589	3459	6792	1589	1235	1589	1781	1797	1589
c, Capacity [veh/h]	208	3851	901	329	4087	956	153	299	160	162	561
d1, Uniform Delay [s]	44.89	13.35	10.72	43.32	11.20	8.21	46.90	35.34	43.58	43.58	23.15
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	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	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.67	0.52	0.56	1.57	0.41	0.11	3.19	0.72	2.95	2.92	0.26
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	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	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	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.26	0.52	0.22	0.57	0.48	0.06	0.56	0.36	0.55	0.55	0.27
d, Delay for Lane Group [s/veh]	45.56	13.87	11.28	44.89	11.62	8.32	50.09	36.06	46.54	46.50	23.40
Lane Group LOS	D	B	B	D	B	A	D	D	D	D	C
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.67	6.73	2.21	2.28	5.85	0.49	2.27	2.31	2.22	2.24	2.57
50th-Percentile Queue Length [ft/ln]	16.71	168.18	55.31	57.12	146.33	12.20	56.64	57.84	55.53	55.95	64.35
95th-Percentile Queue Length [veh/ln]	1.20	10.98	3.98	4.11	9.82	0.88	4.08	4.16	4.00	4.03	4.63
95th-Percentile Queue Length [ft/ln]	30.08	274.52	99.56	102.82	245.52	21.97	101.96	104.12	99.96	100.72	115.82

Movement, Approach, & Intersection Results

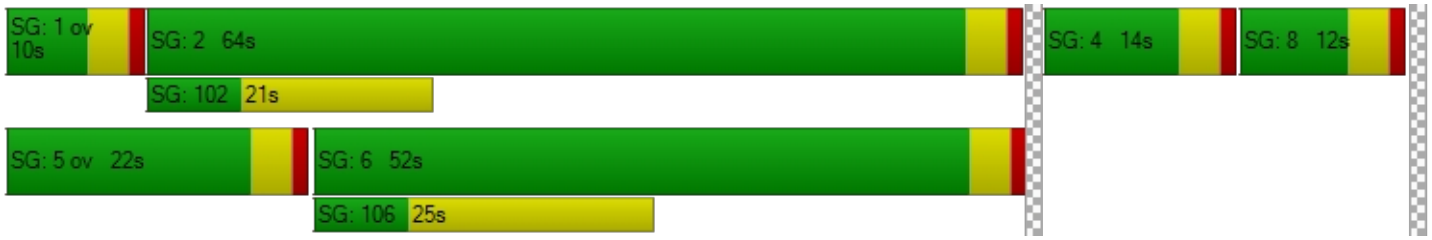
d_M, Delay for Movement [s/veh]	45.56	13.87	11.28	44.89	11.62	8.32	50.09	0.00	36.06	46.52	46.50	23.40
Movement LOS	D	B	B	D	B	A	D		D	D	D	C
d_A, Approach Delay [s/veh]	14.41			14.35			42.31			35.87		
Approach LOS	B			B			D			D		
d_I, Intersection Delay [s/veh]	16.87											
Intersection LOS	B											
Intersection V/C	0.603											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	11.0	11.0
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	39.61	39.61
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.214	2.444
Crosswalk LOS	F	F	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	960	1200	160	200
d_b, Bicycle Delay [s]	13.53	8.01	42.33	40.51
l_b,int, Bicycle LOS Score for Intersection	2.498	2.477	1.560	2.104
Bicycle LOS	B	B	A	B

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Hawthorne Boulevard at Carson Street

Control Type:	Signalized	Delay (sec / veh):	30.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.783

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Carson Street			Carson 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 Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Carson Street			Carson Street		
Base Volume Input [veh/h]	104	2146	294	318	1859	51	128	541	95	259	444	206
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
Proportion of CAVs [%]	0.00											
Growth 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
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]	104	2146	294	318	1859	51	128	541	95	259	444	206
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]	26	537	74	80	465	13	32	135	24	65	111	52
Total Analysis Volume [veh/h]	104	2146	294	318	1859	51	128	541	95	259	444	206
Presence of On-Street Parking	No		No	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]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	6	6	0	6	6	0	6	6	0	6	6	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	13	40	0	15	42	0	13	32	0	13	32	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	28	0	0	24	0	0	21	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	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	R	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	100	100	100	100	100	100	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	7	44	44	11	48	48	9	20	20	9	20	20
g / C, Green / Cycle	0.07	0.44	0.44	0.11	0.47	0.47	0.09	0.20	0.20	0.09	0.20	0.20
(v / s)_i Volume / Saturation Flow Rate	0.06	0.32	0.18	0.09	0.28	0.28	0.07	0.17	0.17	0.07	0.09	0.13
s, saturation flow rate [veh/h]	1781	6792	1589	3459	5094	1837	1781	1870	1774	3459	5094	1589
c, Capacity [veh/h]	133	2972	696	382	2414	871	159	376	357	314	1034	323
d1, Uniform Delay [s]	45.56	23.15	19.43	43.62	19.14	19.14	44.77	38.68	38.70	44.75	34.84	36.54
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.14	0.14	0.11	0.11	0.11
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
d2, Incremental Delay [s]	9.73	1.55	1.88	4.72	1.03	2.83	9.29	7.86	8.41	5.49	0.28	2.10
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	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	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	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.78	0.72	0.42	0.83	0.58	0.58	0.81	0.87	0.87	0.83	0.43	0.64
d, Delay for Lane Group [s/veh]	55.28	24.70	21.31	48.34	20.17	21.97	54.07	46.54	47.11	50.24	35.13	38.64
Lane Group LOS	E	C	C	D	C	C	D	D	D	D	D	D
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.88	10.30	4.96	4.08	7.80	8.88	3.51	8.45	8.09	3.38	3.15	4.75
50th-Percentile Queue Length [ft/ln]	72.07	257.61	123.88	101.91	194.94	221.94	87.64	211.26	202.30	84.38	78.79	118.73
95th-Percentile Queue Length [veh/ln]	5.19	15.57	8.61	7.34	12.38	13.76	6.31	13.22	12.76	6.08	5.67	8.32
95th-Percentile Queue Length [ft/ln]	129.73	389.22	215.14	183.43	309.42	344.10	157.75	330.44	318.93	151.88	141.82	208.08

Movement, Approach, & Intersection Results

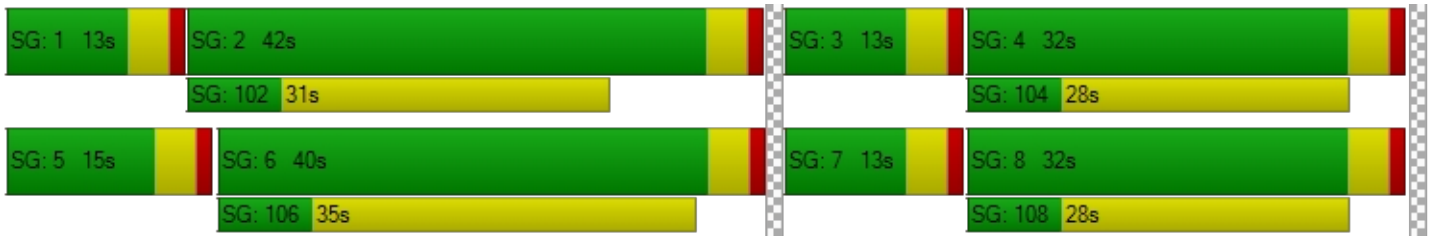
d_M, Delay for Movement [s/veh]	55.28	24.70	21.31	48.34	20.61	21.97	54.07	46.77	47.11	50.24	35.13	38.64
Movement LOS	E	C	C	D	C	C	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	25.56			24.60			48.03			40.23		
Approach LOS	C			C			D			D		
d_I, Intersection Delay [s/veh]	29.96											
Intersection LOS	C											
Intersection V/C	0.783											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	39.64	39.64	39.64	39.64
l_p,int, Pedestrian LOS Score for Intersection	3.435	3.430	2.679	2.982
Crosswalk LOS	C	C	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	719	759	560	560
d_b, Bicycle Delay [s]	20.51	19.25	25.95	25.95
l_b,int, Bicycle LOS Score for Intersection	2.609	2.479	2.190	2.060
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 21: Hawthorne Boulevard at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	48.5
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.827

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Sepulveda Boulevard			Sepulveda Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Sepulveda Boulevard			Sepulveda Boulevard		
Base Volume Input [veh/h]	244	1858	646	292	1754	235	274	962	119	539	814	210
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
Proportion of CAVs [%]	0.00											
Growth 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
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]	244	1858	646	292	1754	235	274	962	119	539	814	210
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]	61	465	162	73	439	59	69	241	30	135	204	53
Total Analysis Volume [veh/h]	244	1858	646	292	1754	235	274	962	119	539	814	210
Presence of On-Street Parking	No		No	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]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Unsigna	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	6	6	0	6	6	0	6	6	0	6	6	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	14	42	0	13	41	0	18	46	0	19	47	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	31	0	0	28	0	0	35	0	0	35	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	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	L	C	R	L	C	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	10	52	9	51	51	12	28	28	15	32	32
g / C, Green / Cycle	0.08	0.43	0.08	0.42	0.42	0.10	0.23	0.23	0.13	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.07	0.27	0.08	0.26	0.15	0.08	0.20	0.20	0.16	0.16	0.13
s, saturation flow rate [veh/h]	3459	6792	3459	6792	1589	3459	3560	1767	3459	5094	1589
c, Capacity [veh/h]	290	2930	262	2874	673	334	834	414	434	1340	418
d1, Uniform Delay [s]	54.20	26.72	55.49	26.93	23.44	53.20	44.16	44.16	52.50	38.81	37.57
k, delay calibration	0.11	0.50	0.11	0.50	0.50	0.11	0.11	0.15	0.11	0.11	0.11
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
d2, Incremental Delay [s]	6.47	1.06	63.93	0.98	1.43	4.97	2.88	7.59	113.56	0.45	0.94
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	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	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	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.84	0.63	1.12	0.61	0.35	0.82	0.87	0.87	1.24	0.61	0.50
d, Delay for Lane Group [s/veh]	60.67	27.77	119.42	27.91	24.87	58.16	47.04	51.75	166.07	39.26	38.51
Lane Group LOS	E	C	F	C	C	E	D	D	F	D	D
Critical Lane Group	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.89	10.48	6.28	9.85	4.77	4.28	10.60	11.06	13.36	7.06	5.36
50th-Percentile Queue Length [ft/ln]	97.32	262.00	156.95	246.22	119.27	107.10	264.97	276.54	334.00	176.52	133.93
95th-Percentile Queue Length [veh/ln]	7.01	15.79	10.76	15.00	8.35	7.68	15.94	16.52	21.10	11.42	9.15
95th-Percentile Queue Length [ft/ln]	175.18	394.73	269.04	374.89	208.82	191.96	398.45	412.90	527.56	285.47	228.83

Movement, Approach, & Intersection Results

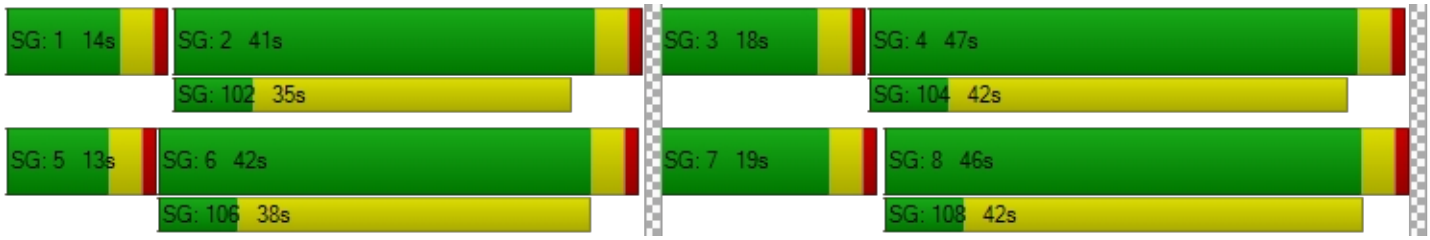
d_M, Delay for Movement [s/veh]	60.67	27.77	0.00	119.42	27.91	24.87	58.16	48.21	51.75	166.07	39.26	38.51
Movement LOS	E	C		F	C	C	E	D	D	F	D	D
d_A, Approach Delay [s/veh]	31.59			39.31			50.54			82.89		
Approach LOS	C			D			D			F		
d_I, Intersection Delay [s/veh]	48.50											
Intersection LOS	D											
Intersection V/C	0.827											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	49.52	49.52	49.52	49.52
l_p,int, Pedestrian LOS Score for Intersection	3.492	3.502	3.062	3.168
Crosswalk LOS	C	D	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	633	617	700	716
d_b, Bicycle Delay [s]	28.03	28.72	25.36	24.72
l_b,int, Bicycle LOS Score for Intersection	2.427	2.501	2.305	2.419
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 27: Western Avenue at Carson Street

Control Type:	Signalized	Delay (sec / veh):	29.7
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.797

Intersection Setup

Name	Western Avenue			Western Avenue			Carson Street			Carson 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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Western Avenue			Western Avenue			Carson Street			Carson Street		
Base Volume Input [veh/h]	129	811	163	212	1069	183	59	1035	129	64	860	105
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
Proportion of CAVs [%]	0.00											
Growth 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
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]	129	811	163	212	1069	183	59	1035	129	64	860	105
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]	32	203	41	53	267	46	15	259	32	16	215	26
Total Analysis Volume [veh/h]	129	811	163	212	1069	183	59	1035	129	64	860	105
Presence of On-Street Parking	No		No	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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
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	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	6	6	0	6	6	0	0	6	0	0	6	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	12	29	0	22	39	0	0	39	0	0	39	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	18	0	0	18	0	0	21	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	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	R	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	8	30	30	13	35	35	35	35	35	35	35	35
g / C, Green / Cycle	0.09	0.34	0.34	0.14	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39
(v / s)_i Volume / Saturation Flow Rate	0.07	0.23	0.10	0.12	0.30	0.12	0.10	0.32	0.32	0.13	0.26	0.26
s, saturation flow rate [veh/h]	1781	3560	1589	1781	3560	1589	582	1870	1798	482	1870	1800
c, Capacity [veh/h]	161	1202	536	252	1382	617	164	726	698	117	726	698
d1, Uniform Delay [s]	40.16	25.60	22.03	37.71	24.10	19.06	36.76	24.70	24.73	43.07	22.89	22.89
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.32	0.32	0.11	0.22	0.22
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
d2, Incremental Delay [s]	8.74	3.05	1.46	7.48	4.27	1.23	1.34	6.58	6.93	3.97	2.24	2.33
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	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	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	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.80	0.67	0.30	0.84	0.77	0.30	0.36	0.82	0.82	0.55	0.68	0.68
d, Delay for Lane Group [s/veh]	48.90	28.65	23.49	45.18	28.37	20.28	38.10	31.28	31.66	47.04	25.13	25.22
Lane Group LOS	D	C	C	D	C	C	D	C	C	D	C	C
Critical Lane Group	Yes	No	No	No	Yes	No	No	No	Yes	No	No	No
50th-Percentile Queue Length [veh/ln]	3.16	7.69	2.70	5.00	10.30	2.78	1.28	12.09	11.74	1.54	8.73	8.42
50th-Percentile Queue Length [ft/ln]	78.93	192.37	67.57	125.02	257.48	69.42	31.93	302.36	293.47	38.62	218.32	210.56
95th-Percentile Queue Length [veh/ln]	5.68	12.24	4.87	8.67	15.56	5.00	2.30	17.80	17.36	2.78	13.58	13.18
95th-Percentile Queue Length [ft/ln]	142.08	306.10	121.63	216.71	389.05	124.95	57.47	444.95	433.94	69.52	339.48	329.54

Movement, Approach, & Intersection Results

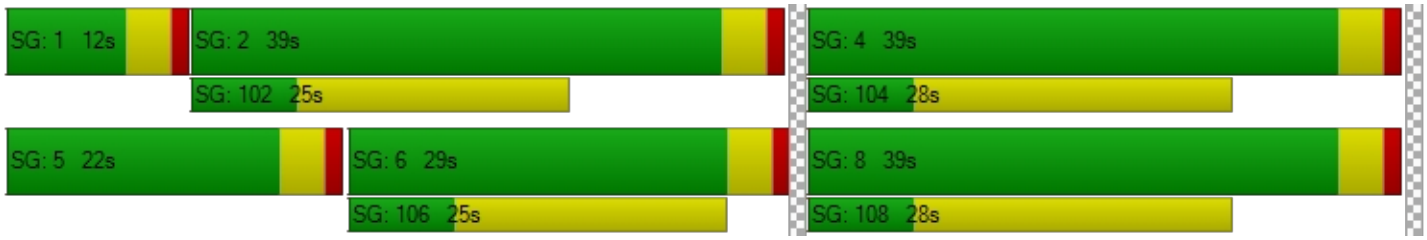
d_M, Delay for Movement [s/veh]	48.90	28.65	23.49	45.18	28.37	20.28	38.10	31.44	31.66	47.04	25.17	25.22
Movement LOS	D	C	C	D	C	C	D	C	C	D	C	C
d_A, Approach Delay [s/veh]	30.25			29.79			31.79			26.54		
Approach LOS	C			C			C			C		
d_I, Intersection Delay [s/veh]	29.71											
Intersection LOS	C											
Intersection V/C	0.797											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	34.70	34.70	34.70	34.70
l_p,int, Pedestrian LOS Score for Intersection	2.928	2.933	2.766	2.775
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	555	777	777	777
d_b, Bicycle Delay [s]	23.49	16.83	16.83	16.83
l_b,int, Bicycle LOS Score for Intersection	2.470	2.767	2.569	2.409
Bicycle LOS	B	C	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



APPENDIX C-III

EXISTING WITH AMBIENT GROWTH (YEAR 2028) WITH PROJECT TRAFFIC CONDITIONS

Intersection Level Of Service Report
Intersection 1: I-405 NB On-Ramp at Redondo Beach Boulevard

Control Type:	Two-way stop	Delay (sec / veh):	13.6
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.213

Intersection Setup

Name	I-405 NB On-Ramp		Redondo Beach Boulevard		Redondo Beach Boulevard	
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 Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	I-405 NB On-Ramp		Redondo Beach Boulevard		Redondo Beach Boulevard	
Base Volume Input [veh/h]	0	0	113	911	636	660
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	0	0	113	911	636	660
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]	0	0	28	228	159	165
Total Analysis Volume [veh/h]	0	0	113	911	636	660
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			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.21	0.01	0.01	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	13.61	0.00	0.00	0.00
Movement LOS			B	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.80	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	19.99	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		1.50		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.66					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 8: Hawthorne Boulevard at Torrance Boulevard

Control Type:	Signalized	Delay (sec / veh):	35.3
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.623

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Torrance Boulevard			Torrance Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Torrance Boulevard			Torrance Boulevard		
Base Volume Input [veh/h]	224	1124	146	145	1478	214	240	761	142	333	960	150
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
Proportion of CAVs [%]	0.00											
Growth 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
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]	224	1124	146	145	1478	214	240	761	142	333	960	150
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]	56	281	37	36	370	54	60	190	36	83	240	38
Total Analysis Volume [veh/h]	224	1124	146	145	1478	214	240	761	142	333	960	150
Presence of On-Street Parking	No		No	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]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	6	6	0	6	6	0	6	6	0	6	6	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	13	44	0	11	42	0	15	49	0	16	50	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	31	0	0	31	0	0	38	0	0	38	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	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	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	9	60	60	7	57	57	10	25	25	12	27	27
g / C, Green / Cycle	0.08	0.50	0.50	0.06	0.48	0.48	0.09	0.21	0.21	0.10	0.23	0.23
(v / s)_i Volume / Saturation Flow Rate	0.06	0.17	0.09	0.04	0.22	0.13	0.07	0.15	0.09	0.10	0.19	0.09
s, saturation flow rate [veh/h]	3459	6792	1589	3459	6792	1589	3459	5094	1589	3459	5094	1589
c, Capacity [veh/h]	262	3366	788	201	3247	760	297	1082	338	348	1157	361
d1, Uniform Delay [s]	54.84	18.30	16.82	55.58	20.90	18.89	53.90	43.77	40.89	53.74	44.19	39.60
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	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	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.89	0.27	0.52	4.82	0.46	0.93	5.20	0.85	0.83	14.41	1.61	0.76
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	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	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	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.86	0.33	0.19	0.72	0.46	0.28	0.81	0.70	0.42	0.96	0.83	0.42
d, Delay for Lane Group [s/veh]	62.73	18.57	17.34	60.40	21.36	19.82	59.10	44.62	41.72	68.16	45.80	40.36
Lane Group LOS	E	B	B	E	C	B	E	D	D	E	D	D
Critical Lane Group	Yes	No	No	No	Yes	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	3.63	4.75	2.35	2.29	6.95	3.78	3.77	7.06	3.72	5.69	9.20	3.87
50th-Percentile Queue Length [ft/ln]	90.84	118.66	58.75	57.34	173.74	94.49	94.34	176.42	93.09	142.29	229.94	96.70
95th-Percentile Queue Length [veh/ln]	6.54	8.32	4.23	4.13	11.27	6.80	6.79	11.41	6.70	9.60	14.17	6.96
95th-Percentile Queue Length [ft/ln]	163.50	207.99	105.74	103.21	281.82	170.09	169.82	285.33	167.56	240.11	354.29	174.05

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	62.73	18.57	17.34	60.40	21.36	19.82	59.10	44.62	41.72	68.16	45.80	40.36
Movement LOS	E	B	B	E	C	B	E	D	D	E	D	D
d_A, Approach Delay [s/veh]	25.07			24.26			47.30			50.39		
Approach LOS	C			C			D			D		
d_I, Intersection Delay [s/veh]	35.29											
Intersection LOS	D											
Intersection V/C	0.623											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	49.52	49.52	49.52	49.52
l_p,int, Pedestrian LOS Score for Intersection	3.397	3.389	3.138	3.133
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	666	633	750	766
d_b, Bicycle Delay [s]	26.68	28.03	23.45	22.83
l_b,int, Bicycle LOS Score for Intersection	2.176	2.317	2.188	2.353
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 12: Hawthorne Boulevard at Fashion Way

Control Type:	Signalized	Delay (sec / veh):	10.9
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.429

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Fashion Way			Fashion Way		
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 Entry Pocket	1	0	1	1	0	1	0	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Fashion Way			Fashion Way		
Base Volume Input [veh/h]	64	1359	87	73	1828	74	41	0	42	53	26	72
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
Proportion of CAVs [%]	0.00											
Growth 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
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]	64	1359	87	73	1828	74	41	0	42	53	26	72
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]	16	340	22	18	457	19	10	0	11	13	7	18
Total Analysis Volume [veh/h]	64	1359	87	73	1828	74	41	0	42	53	26	72
Presence of On-Street Parking	No		No	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]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Permiss	Overlap	Split	Split	Overlap
Signal Group	1	6	0	5	2	0	8	8	8	0	4	4
Auxiliary Signal Groups									1,8			4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lag	-	-	-	-	-
Minimum Green [s]	6	6	0	6	6	0	6	6	6	0	6	6
Maximum Green [s]	30	30	0	30	30	0	30	30	30	0	30	30
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	0.0	3.0	3.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	0.0	1.0	1.0
Split [s]	10	54	0	26	70	0	10	10	10	0	10	10
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	0.0	3.0	3.0
Walk [s]	0	7	0	0	7	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	18	0	0	14	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No		No				No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	0.0	2.0	2.0
Minimum Recall	No	No		No	No		No		No		No	No
Maximum Recall	No	No		No	No		No		No		No	No
Pedestrian Recall	No	No		No	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	R	L	C	R	L	R	L	C	R
C, Cycle Length [s]	100	100	100	100	100	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	0.00
g_i, Effective Green Time [s]	5	67	67	5	67	67	6	15	6	6	25
g / C, Green / Cycle	0.05	0.67	0.67	0.05	0.67	0.67	0.06	0.15	0.06	0.06	0.25
(v / s)_i Volume / Saturation Flow Rate	0.02	0.20	0.05	0.02	0.27	0.05	0.03	0.03	0.02	0.02	0.05
s, saturation flow rate [veh/h]	3459	6792	1589	3459	6792	1589	1328	1589	1781	1838	1589
c, Capacity [veh/h]	173	4546	1064	181	4561	1067	121	237	106	109	398
d1, Uniform Delay [s]	45.98	6.84	5.79	45.88	7.38	5.66	47.87	37.19	45.25	45.24	29.42
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	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	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.31	0.17	0.15	1.44	0.26	0.13	1.64	0.35	2.15	2.04	0.22
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	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	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	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.37	0.30	0.08	0.40	0.40	0.07	0.34	0.18	0.37	0.37	0.18
d, Delay for Lane Group [s/veh]	47.28	7.01	5.94	47.33	7.65	5.78	49.52	37.55	47.41	47.28	29.63
Lane Group LOS	D	A	A	D	A	A	D	D	D	D	C
Critical Lane Group	Yes	No	No	No	Yes	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.80	2.74	0.63	0.91	4.00	0.52	1.06	0.92	0.99	1.01	1.38
50th-Percentile Queue Length [ft/ln]	19.95	68.43	15.65	22.76	99.90	13.07	26.60	22.94	24.86	25.21	34.38
95th-Percentile Queue Length [veh/ln]	1.44	4.93	1.13	1.64	7.19	0.94	1.92	1.65	1.79	1.82	2.48
95th-Percentile Queue Length [ft/ln]	35.91	123.17	28.17	40.97	179.82	23.53	47.89	41.30	44.75	45.38	61.88

Movement, Approach, & Intersection Results

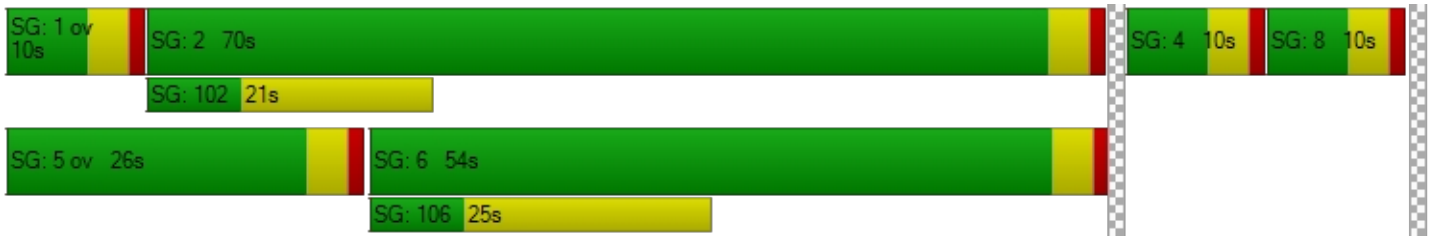
d_M, Delay for Movement [s/veh]	47.28	7.01	5.94	47.33	7.65	5.78	49.52	0.00	37.55	47.37	47.28	29.63
Movement LOS	D	A	A	D	A	A	D		D	D	D	C
d_A, Approach Delay [s/veh]	8.65			9.04			43.46			38.90		
Approach LOS	A			A			D			D		
d_I, Intersection Delay [s/veh]	10.86											
Intersection LOS	B											
Intersection V/C	0.429											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	11.0	11.0
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	39.61	39.61
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.196	2.365
Crosswalk LOS	F	F	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1000	1320	120	120
d_b, Bicycle Delay [s]	12.51	5.78	44.19	44.19
l_b,int, Bicycle LOS Score for Intersection	2.182	2.374	1.560	1.809
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Hawthorne Boulevard at Carson Street

Control Type:	Signalized	Delay (sec / veh):	25.8
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.652

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Carson Street			Carson 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 Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Carson Street			Carson Street		
Base Volume Input [veh/h]	113	1355	144	126	1651	68	65	466	70	287	549	147
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
Proportion of CAVs [%]	0.00											
Growth 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
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]	113	1355	144	126	1651	68	65	466	70	287	549	147
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]	28	339	36	32	413	17	16	117	18	72	137	37
Total Analysis Volume [veh/h]	113	1355	144	126	1651	68	65	466	70	287	549	147
Presence of On-Street Parking	No		No	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]	95
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	6	6	0	6	6	0	6	6	0	6	6	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	12	39	0	10	37	0	11	32	0	14	35	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	28	0	0	24	0	0	21	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	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	R	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	95	95	95	95	95	95	95	95	95	95	95	95
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	8	47	47	6	45	45	5	17	17	10	21	21
g / C, Green / Cycle	0.08	0.49	0.49	0.06	0.47	0.47	0.05	0.18	0.18	0.10	0.23	0.23
(v / s)_i Volume / Saturation Flow Rate	0.06	0.20	0.09	0.04	0.25	0.25	0.04	0.15	0.15	0.08	0.11	0.09
s, saturation flow rate [veh/h]	1781	6792	1589	3459	5094	1822	1781	1870	1786	3459	5094	1589
c, Capacity [veh/h]	143	3334	780	214	2406	861	94	328	314	358	1152	359
d1, Uniform Delay [s]	42.96	15.40	13.56	43.46	17.63	17.63	44.29	37.87	37.92	41.70	31.94	31.40
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	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	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.27	0.37	0.52	2.57	0.83	2.30	8.61	5.48	5.93	4.20	0.31	0.75
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	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	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	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.79	0.41	0.18	0.59	0.53	0.53	0.69	0.83	0.84	0.80	0.48	0.41
d, Delay for Lane Group [s/veh]	52.24	15.77	14.08	46.03	18.45	19.92	52.90	43.36	43.84	45.90	32.24	32.15
Lane Group LOS	D	B	B	D	B	B	D	D	D	D	C	C
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.95	4.54	1.78	1.51	6.37	7.19	1.72	6.55	6.34	3.46	3.63	2.92
50th-Percentile Queue Length [ft/ln]	73.82	113.53	44.51	37.71	159.30	179.72	42.99	163.72	158.45	86.61	90.87	72.98
95th-Percentile Queue Length [veh/ln]	5.32	8.04	3.20	2.72	10.51	11.59	3.10	10.75	10.47	6.24	6.54	5.25
95th-Percentile Queue Length [ft/ln]	132.88	200.91	80.11	67.89	262.80	289.65	77.38	268.64	261.67	155.90	163.57	131.37

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	52.24	15.77	14.08	46.03	18.80	19.92	52.90	43.56	43.84	45.90	32.24	32.15
Movement LOS	D	B	B	D	B	B	D	D	D	D	C	C
d_A, Approach Delay [s/veh]	18.18			20.70			44.60			36.22		
Approach LOS	B			C			D			D		
d_I, Intersection Delay [s/veh]	25.77											
Intersection LOS	C											
Intersection V/C	0.652											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	37.18	37.18	37.18	37.18
l_p,int, Pedestrian LOS Score for Intersection	3.322	3.301	2.671	2.937
Crosswalk LOS	C	C	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	736	694	589	652
d_b, Bicycle Delay [s]	18.98	20.27	23.66	21.59
l_b,int, Bicycle LOS Score for Intersection	2.225	2.321	2.055	2.100
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 21: Hawthorne Boulevard at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	40.5
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.722

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Sepulveda Boulevard			Sepulveda Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Sepulveda Boulevard			Sepulveda Boulevard		
Base Volume Input [veh/h]	123	1336	401	115	1732	202	229	818	79	579	1084	201
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
Proportion of CAVs [%]	0.00											
Growth 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
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]	123	1336	401	115	1732	202	229	818	79	579	1084	201
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]	31	334	100	29	433	51	57	205	20	145	271	50
Total Analysis Volume [veh/h]	123	1336	401	115	1732	202	229	818	79	579	1084	201
Presence of On-Street Parking	No		No	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]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Unsigna	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	6	6	0	6	6	0	6	6	0	6	6	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	10	42	0	10	42	0	13	46	0	22	55	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	31	0	0	28	0	0	35	0	0	35	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	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	L	C	R	L	C	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	6	56	6	56	56	9	24	24	18	33	33
g / C, Green / Cycle	0.05	0.47	0.05	0.47	0.47	0.08	0.20	0.20	0.15	0.27	0.27
(v / s)_i Volume / Saturation Flow Rate	0.04	0.20	0.03	0.26	0.13	0.07	0.17	0.17	0.17	0.21	0.13
s, saturation flow rate [veh/h]	3459	6792	3459	6792	1589	3459	3560	1787	3459	5094	1589
c, Capacity [veh/h]	176	3190	172	3183	745	262	701	352	520	1384	432
d1, Uniform Delay [s]	56.09	21.01	56.08	22.75	19.41	54.93	46.51	46.53	51.01	40.46	36.46
k, delay calibration	0.11	0.50	0.11	0.50	0.50	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	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.00	0.41	4.44	0.67	0.90	8.99	3.03	5.88	57.69	1.01	0.78
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	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	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	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.70	0.42	0.67	0.54	0.27	0.88	0.85	0.85	1.11	0.78	0.47
d, Delay for Lane Group [s/veh]	61.09	21.42	60.52	23.42	20.31	63.92	49.53	52.41	108.69	41.46	37.24
Lane Group LOS	E	C	E	C	C	E	D	D	F	D	D
Critical Lane Group	Yes	No	No	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.96	6.23	1.82	8.76	3.61	3.75	8.86	9.20	11.95	9.95	5.02
50th-Percentile Queue Length [ft/ln]	48.93	155.82	45.50	218.90	90.31	93.84	221.52	229.94	298.78	248.79	125.45
95th-Percentile Queue Length [veh/ln]	3.52	10.33	3.28	13.61	6.50	6.76	13.74	14.17	18.50	15.13	8.69
95th-Percentile Queue Length [ft/ln]	88.07	258.17	81.89	340.23	162.56	168.91	343.56	354.28	462.49	378.13	217.29

Movement, Approach, & Intersection Results

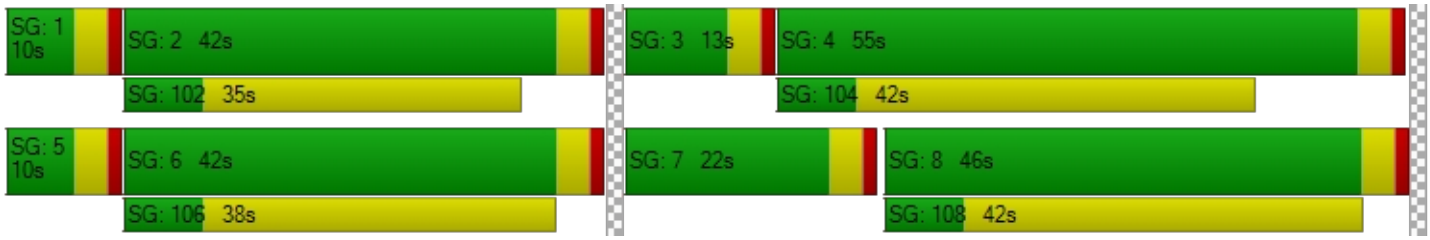
d_M, Delay for Movement [s/veh]	61.09	21.42	0.00	60.52	23.42	20.31	63.92	50.31	52.41	108.69	41.46	37.24
Movement LOS	E	C		E	C	C	E	D	D	F	D	D
d_A, Approach Delay [s/veh]	24.76			25.20			53.23			61.89		
Approach LOS	C			C			D			E		
d_I, Intersection Delay [s/veh]	40.48											
Intersection LOS	D											
Intersection V/C	0.722											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	49.52	49.52	49.52	49.52
l_p,int, Pedestrian LOS Score for Intersection	3.433	3.430	3.048	3.166
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	633	633	700	850
d_b, Bicycle Delay [s]	28.03	28.03	25.36	19.85
l_b,int, Bicycle LOS Score for Intersection	2.161	2.405	2.179	2.585
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 27: Western Avenue at Carson Street

Control Type:	Signalized	Delay (sec / veh):	27.6
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.783

Intersection Setup

Name	Western Avenue			Western Avenue			Carson Street			Carson 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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Western Avenue			Western Avenue			Carson Street			Carson Street		
Base Volume Input [veh/h]	159	1065	115	68	757	144	55	629	112	102	1126	126
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
Proportion of CAVs [%]	0.00											
Growth 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
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]	159	1065	115	68	757	144	55	629	112	102	1126	126
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]	40	266	29	17	189	36	14	157	28	26	282	32
Total Analysis Volume [veh/h]	159	1065	115	68	757	144	55	629	112	102	1126	126
Presence of On-Street Parking	No		No	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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
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	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	6	6	0	6	6	0	0	6	0	0	6	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	19	38	0	10	29	0	0	42	0	0	42	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	18	0	0	18	0	0	21	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	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	R	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	10	35	35	5	30	30	38	38	38	38	38	38
g / C, Green / Cycle	0.11	0.39	0.39	0.06	0.34	0.34	0.42	0.42	0.42	0.42	0.42	0.42
(v / s)_i Volume / Saturation Flow Rate	0.09	0.30	0.07	0.04	0.21	0.09	0.12	0.20	0.20	0.14	0.34	0.34
s, saturation flow rate [veh/h]	1781	3560	1589	1781	3560	1589	444	1870	1773	718	1870	1805
c, Capacity [veh/h]	195	1387	619	99	1195	533	122	788	747	258	788	761
d1, Uniform Delay [s]	39.19	23.93	18.08	41.75	25.24	21.86	41.78	18.91	18.92	29.65	22.83	22.89
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.32	0.32
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
d2, Incremental Delay [s]	7.95	4.12	0.66	8.13	2.56	1.24	2.60	0.46	0.49	0.98	5.64	6.03
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	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	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	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.81	0.77	0.19	0.69	0.63	0.27	0.45	0.48	0.48	0.39	0.81	0.81
d, Delay for Lane Group [s/veh]	47.14	28.05	18.74	49.88	27.81	23.10	44.38	19.37	19.41	30.63	28.46	28.92
Lane Group LOS	D	C	B	D	C	C	D	B	B	C	C	C
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.82	10.20	1.65	1.69	7.03	2.36	1.30	5.62	5.35	1.96	12.37	12.11
50th-Percentile Queue Length [ft/ln]	95.41	254.91	41.20	42.26	175.67	58.97	32.62	140.53	133.65	49.02	309.32	302.84
95th-Percentile Queue Length [veh/ln]	6.87	15.43	2.97	3.04	11.37	4.25	2.35	9.51	9.14	3.53	18.14	17.82
95th-Percentile Queue Length [ft/ln]	171.74	385.83	74.16	76.06	284.36	106.14	58.71	237.73	228.45	88.24	453.54	445.53

Movement, Approach, & Intersection Results

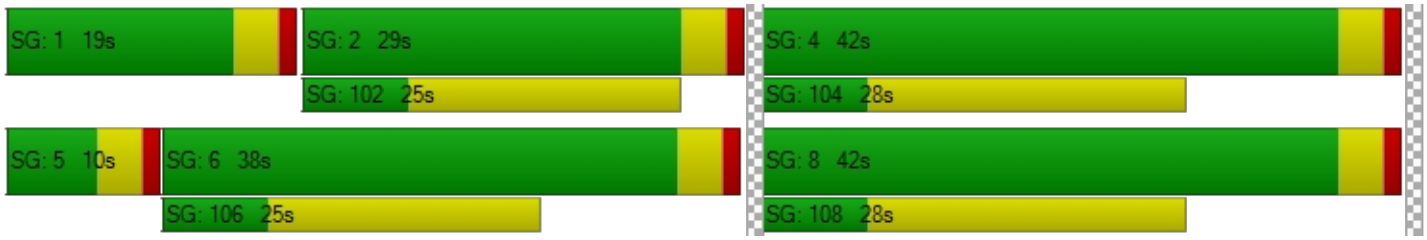
d_M, Delay for Movement [s/veh]	47.14	28.05	18.74	49.88	27.81	23.10	44.38	19.39	19.41	30.63	28.66	28.92
Movement LOS	D	C	B	D	C	C	D	B	B	C	C	C
d_A, Approach Delay [s/veh]	29.52			28.66			21.12			28.83		
Approach LOS	C			C			C			C		
d_I, Intersection Delay [s/veh]	27.62											
Intersection LOS	C											
Intersection V/C	0.783											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	34.68	34.68	34.68	34.68
l_p,int, Pedestrian LOS Score for Intersection	2.973	2.891	2.733	2.722
Crosswalk LOS	C	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	755	555	844	844
d_b, Bicycle Delay [s]	17.43	23.48	15.03	15.03
l_b,int, Bicycle LOS Score for Intersection	2.664	2.359	2.216	2.677
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 1: I-405 NB On-Ramp at Redondo Beach Boulevard

Control Type:	Two-way stop	Delay (sec / veh):	19.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.540

Intersection Setup

Name	I-405 NB On-Ramp		Redondo Beach Boulevard		Redondo Beach Boulevard	
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 Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	I-405 NB On-Ramp		Redondo Beach Boulevard		Redondo Beach Boulevard	
Base Volume Input [veh/h]	0	0	293	1384	658	612
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	0	0	293	1384	658	612
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]	0	0	73	346	165	153
Total Analysis Volume [veh/h]	0	0	293	1384	658	612
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						
Number of Storage Spaces in Median	0		0		0	

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.54	0.01	0.01	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	19.14	0.00	0.00	0.00
Movement LOS			C	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	3.19	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	79.80	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		3.34		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.90					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 8: Hawthorne Boulevard at Torrance Boulevard

Control Type:	Signalized	Delay (sec / veh):	37.7
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.711

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Torrance Boulevard			Torrance Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Torrance Boulevard			Torrance Boulevard		
Base Volume Input [veh/h]	274	1795	281	199	1539	183	255	951	308	349	821	189
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
Proportion of CAVs [%]	0.00											
Growth 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
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]	274	1795	281	199	1539	183	255	951	308	349	821	189
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]	69	449	70	50	385	46	64	238	77	87	205	47
Total Analysis Volume [veh/h]	274	1795	281	199	1539	183	255	951	308	349	821	189
Presence of On-Street Parking	No		No	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]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	6	6	0	6	6	0	6	6	0	6	6	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	13	43	0	12	42	0	15	49	0	16	50	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	31	0	0	31	0	0	38	0	0	38	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	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	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	9	56	56	8	55	55	11	28	28	12	29	29
g / C, Green / Cycle	0.08	0.46	0.46	0.07	0.46	0.46	0.09	0.24	0.24	0.10	0.25	0.25
(v / s)_i Volume / Saturation Flow Rate	0.08	0.26	0.18	0.06	0.23	0.12	0.07	0.19	0.19	0.10	0.16	0.12
s, saturation flow rate [veh/h]	3459	6792	1589	3459	6792	1589	3459	5094	1589	3459	5094	1589
c, Capacity [veh/h]	262	3149	737	233	3093	724	311	1198	374	348	1252	391
d1, Uniform Delay [s]	55.49	23.47	20.97	55.41	23.02	20.12	53.68	43.18	43.56	54.00	40.71	38.76
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	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	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	39.18	0.75	1.50	8.65	0.57	0.84	5.36	1.23	4.61	23.33	0.59	0.93
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	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	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	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.05	0.57	0.38	0.85	0.50	0.25	0.82	0.79	0.82	1.00	0.66	0.48
d, Delay for Lane Group [s/veh]	94.67	24.22	22.47	64.06	23.59	20.96	59.04	44.42	48.17	77.33	41.30	39.68
Lane Group LOS	F	C	C	E	C	C	E	D	D	F	D	D
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	5.38	9.30	5.42	3.26	7.71	3.32	4.01	8.95	9.12	6.37	7.33	4.88
50th-Percentile Queue Length [ft/ln]	134.46	232.47	135.45	81.49	192.77	83.07	100.31	223.84	228.00	159.19	183.31	121.92
95th-Percentile Queue Length [veh/ln]	9.32	14.30	9.24	5.87	12.26	5.98	7.22	13.86	14.07	10.52	11.77	8.50
95th-Percentile Queue Length [ft/ln]	233.04	357.50	230.88	146.68	306.62	149.53	180.56	346.53	351.82	263.02	294.33	212.46

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	94.67	24.22	22.47	64.06	23.59	20.96	59.04	44.42	48.17	77.33	41.30	39.68
Movement LOS	F	C	C	E	C	C	E	D	D	F	D	D
d_A, Approach Delay [s/veh]	32.23			27.54			47.64			50.33		
Approach LOS	C			C			D			D		
d_I, Intersection Delay [s/veh]	37.67											
Intersection LOS	D											
Intersection V/C	0.711											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	49.52	49.52	49.52	49.52
l_p,int, Pedestrian LOS Score for Intersection	3.495	3.461	3.165	3.165
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	650	633	750	766
d_b, Bicycle Delay [s]	27.35	28.03	23.45	22.83
l_b,int, Bicycle LOS Score for Intersection	2.529	2.352	2.392	2.307
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 12: Hawthorne Boulevard at Fashion Way

Control Type:	Signalized	Delay (sec / veh):	17.0
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.603

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Fashion Way			Fashion Way		
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 Entry Pocket	1	0	1	1	0	1	0	0	1	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Fashion Way			Fashion Way		
Base Volume Input [veh/h]	55	2021	198	196	1982	54	86	0	107	161	17	157
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
Proportion of CAVs [%]	0.00											
Growth 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
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]	55	2021	198	196	1982	54	86	0	107	161	17	157
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]	14	505	50	49	496	14	22	0	27	40	4	39
Total Analysis Volume [veh/h]	55	2021	198	196	1982	54	86	0	107	161	17	157
Presence of On-Street Parking	No		No	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]	105
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Permiss	Overlap	Split	Split	Overlap
Signal Group	1	6	0	5	2	0	8	8	8	0	4	4
Auxiliary Signal Groups									1,8			4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lag	-	-	-	-	-
Minimum Green [s]	6	6	0	6	6	0	6	6	6	0	6	6
Maximum Green [s]	30	30	0	30	30	0	30	30	30	0	30	30
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	0.0	3.0	3.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	0.0	1.0	1.0
Split [s]	10	57	0	22	69	0	13	13	13	0	13	13
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	0.0	3.0	3.0
Walk [s]	0	7	0	0	7	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	18	0	0	14	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No		No				No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	0.0	2.0	2.0
Minimum Recall	No	No		No	No		No		No		No	No
Maximum Recall	No	No		No	No		No		No		No	No
Pedestrian Recall	No	No		No	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	R	L	C	R	L	R	L	C	R
C, Cycle Length [s]	105	105	105	105	105	105	105	105	105	105	105
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	0.00
g_i, Effective Green Time [s]	6	61	61	10	65	65	9	19	9	9	36
g / C, Green / Cycle	0.06	0.58	0.58	0.10	0.62	0.62	0.08	0.18	0.09	0.09	0.34
(v / s)_i Volume / Saturation Flow Rate	0.02	0.30	0.12	0.06	0.29	0.03	0.07	0.07	0.05	0.05	0.10
s, saturation flow rate [veh/h]	3459	6792	1589	3459	6792	1589	1229	1589	1781	1797	1589
c, Capacity [veh/h]	198	3940	922	337	4213	986	146	285	153	154	546
d1, Uniform Delay [s]	47.42	13.18	10.57	45.35	10.69	7.84	49.52	37.90	46.18	46.18	25.10
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	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	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.75	0.48	0.53	1.59	0.38	0.11	3.73	0.81	3.44	3.41	0.29
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	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	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	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.28	0.51	0.21	0.58	0.47	0.05	0.59	0.37	0.58	0.58	0.29
d, Delay for Lane Group [s/veh]	48.17	13.66	11.11	46.94	11.07	7.94	53.25	38.71	49.62	49.58	25.39
Lane Group LOS	D	B	B	D	B	A	D	D	D	D	C
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.71	6.87	2.26	2.51	5.85	0.49	2.41	2.48	2.36	2.38	2.87
50th-Percentile Queue Length [ft/ln]	17.71	171.86	56.42	62.76	146.35	12.19	60.25	61.93	59.12	59.57	71.86
95th-Percentile Queue Length [veh/ln]	1.28	11.17	4.06	4.52	9.82	0.88	4.34	4.46	4.26	4.29	5.17
95th-Percentile Queue Length [ft/ln]	31.89	279.36	101.56	112.98	245.55	21.95	108.44	111.48	106.41	107.22	129.35

Movement, Approach, & Intersection Results

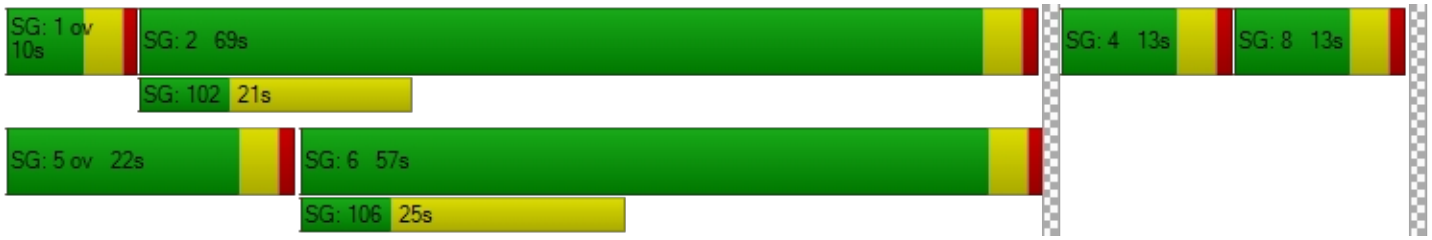
d_M, Delay for Movement [s/veh]	48.17	13.66	11.11	46.94	11.07	7.94	53.25	0.00	38.71	49.61	49.58	25.39
Movement LOS	D	B	B	D	B	A	D		D	D	D	C
d_A, Approach Delay [s/veh]	14.27			14.15			45.19			38.25		
Approach LOS	B			B			D			D		
d_I, Intersection Delay [s/veh]	17.00											
Intersection LOS	B											
Intersection V/C	0.603											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	11.0	11.0
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	42.08	42.08
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.216	2.449
Crosswalk LOS	F	F	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1009	1238	171	171
d_b, Bicycle Delay [s]	12.88	7.62	43.89	43.89
l_b,int, Bicycle LOS Score for Intersection	2.498	2.480	1.560	2.112
Bicycle LOS	B	B	A	B

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Hawthorne Boulevard at Carson Street

Control Type:	Signalized	Delay (sec / veh):	30.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.784

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Carson Street			Carson 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 Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Carson Street			Carson Street		
Base Volume Input [veh/h]	104	2146	294	318	1859	51	128	544	95	259	446	206
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
Proportion of CAVs [%]	0.00											
Growth 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
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]	104	2146	294	318	1859	51	128	544	95	259	446	206
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]	26	537	74	80	465	13	32	136	24	65	112	52
Total Analysis Volume [veh/h]	104	2146	294	318	1859	51	128	544	95	259	446	206
Presence of On-Street Parking	No		No	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]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	6	6	0	6	6	0	6	6	0	6	6	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	11	40	0	15	44	0	13	32	0	13	32	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	28	0	0	24	0	0	21	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	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	R	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	100	100	100	100	100	100	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	7	44	44	11	48	48	9	20	20	9	20	20
g / C, Green / Cycle	0.07	0.44	0.44	0.11	0.48	0.48	0.09	0.20	0.20	0.09	0.20	0.20
(v / s)_i Volume / Saturation Flow Rate	0.06	0.32	0.18	0.09	0.28	0.28	0.07	0.18	0.18	0.07	0.09	0.13
s, saturation flow rate [veh/h]	1781	6792	1589	3459	5094	1837	1781	1870	1774	3459	5094	1589
c, Capacity [veh/h]	126	2967	694	382	2428	876	159	378	359	314	1038	324
d1, Uniform Delay [s]	45.91	23.21	19.48	43.62	18.93	18.93	44.77	38.65	38.67	44.75	34.79	36.47
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.15	0.15	0.11	0.11	0.11
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
d2, Incremental Delay [s]	12.53	1.57	1.89	4.72	1.01	2.78	9.29	7.96	8.51	5.49	0.28	2.07
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	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	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	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.82	0.72	0.42	0.83	0.58	0.58	0.81	0.87	0.87	0.83	0.43	0.64
d, Delay for Lane Group [s/veh]	58.44	24.78	21.37	48.34	19.94	21.71	54.07	46.61	47.18	50.24	35.07	38.54
Lane Group LOS	E	C	C	D	B	C	D	D	D	D	D	D
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.97	10.32	4.96	4.08	7.75	8.82	3.51	8.50	8.14	3.38	3.16	4.74
50th-Percentile Queue Length [ft/ln]	74.36	258.09	124.10	101.91	193.64	220.39	87.64	212.47	203.49	84.38	79.09	118.56
95th-Percentile Queue Length [veh/ln]	5.35	15.59	8.62	7.34	12.31	13.68	6.31	13.28	12.82	6.08	5.69	8.31
95th-Percentile Queue Length [ft/ln]	133.85	389.82	215.45	183.43	307.74	342.12	157.75	332.00	320.46	151.88	142.36	207.84

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	58.44	24.78	21.37	48.34	20.37	21.71	54.07	46.84	47.18	50.24	35.07	38.54
Movement LOS	E	C	C	D	C	C	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	25.76			24.40			48.08			40.17		
Approach LOS	C			C			D			D		
d_I, Intersection Delay [s/veh]	29.98											
Intersection LOS	C											
Intersection V/C	0.784											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	39.64	39.64	39.64	39.64
l_p,int, Pedestrian LOS Score for Intersection	3.435	3.430	2.680	2.982
Crosswalk LOS	C	C	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	719	799	560	560
d_b, Bicycle Delay [s]	20.51	18.03	25.95	25.95
l_b,int, Bicycle LOS Score for Intersection	2.609	2.479	2.192	2.061
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 21: Hawthorne Boulevard at Sepulveda Boulevard

Control Type:	Signalized	Delay (sec / veh):	48.7
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.828

Intersection Setup

Name	Hawthorne Boulevard			Hawthorne Boulevard			Sepulveda Boulevard			Sepulveda Boulevard		
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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	1
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hawthorne Boulevard			Hawthorne Boulevard			Sepulveda Boulevard			Sepulveda Boulevard		
Base Volume Input [veh/h]	244	1858	649	292	1754	235	274	965	119	541	816	210
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
Proportion of CAVs [%]	0.00											
Growth 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
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]	244	1858	649	292	1754	235	274	965	119	541	816	210
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]	61	465	162	73	439	59	69	241	30	135	204	53
Total Analysis Volume [veh/h]	244	1858	649	292	1754	235	274	965	119	541	816	210
Presence of On-Street Parking	No		No	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]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Unsigna	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	6	6	0	6	6	0	6	6	0	6	6	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	14	42	0	13	41	0	18	46	0	19	47	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	31	0	0	28	0	0	35	0	0	35	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	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	L	C	R	L	C	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	10	52	9	51	51	12	28	28	15	32	32
g / C, Green / Cycle	0.08	0.43	0.08	0.42	0.42	0.10	0.23	0.23	0.13	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.07	0.27	0.08	0.26	0.15	0.08	0.20	0.20	0.16	0.16	0.13
s, saturation flow rate [veh/h]	3459	6792	3459	6792	1589	3459	3560	1767	3459	5094	1589
c, Capacity [veh/h]	290	2926	262	2870	672	334	836	415	434	1343	419
d1, Uniform Delay [s]	54.20	26.77	55.49	26.99	23.49	53.20	44.12	44.13	52.50	38.77	37.51
k, delay calibration	0.11	0.50	0.11	0.50	0.50	0.11	0.11	0.15	0.11	0.11	0.11
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
d2, Incremental Delay [s]	6.47	1.06	63.93	0.98	1.44	4.97	2.88	7.63	115.58	0.45	0.93
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	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	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	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.84	0.63	1.12	0.61	0.35	0.82	0.87	0.87	1.25	0.61	0.50
d, Delay for Lane Group [s/veh]	60.67	27.83	119.42	27.97	24.93	58.16	47.00	51.76	168.08	39.22	38.44
Lane Group LOS	E	C	F	C	C	E	D	D	F	D	D
Critical Lane Group	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.89	10.49	6.28	9.86	4.78	4.28	10.63	11.10	13.48	7.08	5.35
50th-Percentile Queue Length [ft/ln]	97.32	262.33	156.95	246.53	119.42	107.10	265.64	277.42	337.03	176.88	133.81
95th-Percentile Queue Length [veh/ln]	7.01	15.81	10.76	15.01	8.36	7.68	15.97	16.56	21.29	11.44	9.15
95th-Percentile Queue Length [ft/ln]	175.18	395.15	269.04	375.28	209.02	191.96	399.29	414.00	532.31	285.93	228.66

Movement, Approach, & Intersection Results

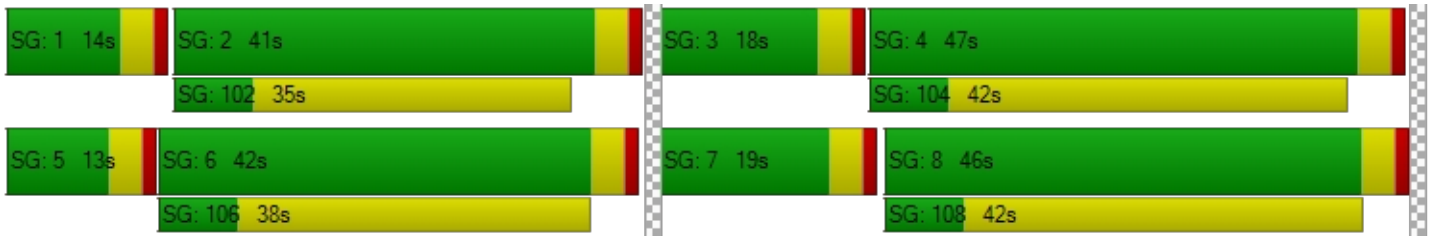
d_M, Delay for Movement [s/veh]	60.67	27.83	0.00	119.42	27.97	24.93	58.16	48.19	51.76	168.08	39.22	38.44
Movement LOS	E	C		F	C	C	E	D	D	F	D	D
d_A, Approach Delay [s/veh]	31.65			39.36			50.51			83.60		
Approach LOS	C			D			D			F		
d_I, Intersection Delay [s/veh]	48.70											
Intersection LOS	D											
Intersection V/C	0.828											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	49.52	49.52	49.52	49.52
l_p,int, Pedestrian LOS Score for Intersection	3.492	3.502	3.063	3.169
Crosswalk LOS	C	D	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	633	617	700	716
d_b, Bicycle Delay [s]	28.03	28.72	25.36	24.72
l_b,int, Bicycle LOS Score for Intersection	2.427	2.501	2.307	2.421
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 27: Western Avenue at Carson Street

Control Type:	Signalized	Delay (sec / veh):	29.8
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.798

Intersection Setup

Name	Western Avenue			Western Avenue			Carson Street			Carson 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 Entry Pocket	1	0	1	1	0	1	1	0	0	1	0	0
Entry 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
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Western Avenue			Western Avenue			Carson Street			Carson Street		
Base Volume Input [veh/h]	129	811	163	212	1069	183	59	1040	129	64	868	105
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
Proportion of CAVs [%]	0.00											
Growth 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
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]	129	811	163	212	1069	183	59	1040	129	64	868	105
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]	32	203	41	53	267	46	15	260	32	16	217	26
Total Analysis Volume [veh/h]	129	811	163	212	1069	183	59	1040	129	64	868	105
Presence of On-Street Parking	No		No	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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
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	1	6	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	6	6	0	6	6	0	0	6	0	0	6	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	12	29	0	22	39	0	0	39	0	0	39	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	18	0	0	18	0	0	21	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	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	R	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	8	30	30	13	35	35	35	35	35	35	35	35
g / C, Green / Cycle	0.09	0.34	0.34	0.14	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39
(v / s)_i Volume / Saturation Flow Rate	0.07	0.23	0.10	0.12	0.30	0.12	0.10	0.32	0.32	0.13	0.27	0.27
s, saturation flow rate [veh/h]	1781	3560	1589	1781	3560	1589	578	1870	1799	480	1870	1800
c, Capacity [veh/h]	161	1202	536	252	1382	617	161	726	698	116	726	698
d1, Uniform Delay [s]	40.16	25.60	22.03	37.71	24.10	19.06	37.00	24.75	24.78	43.17	22.96	22.96
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.32	0.33	0.11	0.22	0.22
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
d2, Incremental Delay [s]	8.74	3.05	1.46	7.48	4.27	1.23	1.38	6.76	7.13	4.08	2.34	2.43
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	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	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	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.80	0.67	0.30	0.84	0.77	0.30	0.37	0.82	0.82	0.55	0.68	0.68
d, Delay for Lane Group [s/veh]	48.90	28.65	23.49	45.18	28.37	20.28	38.38	31.51	31.91	47.25	25.30	25.39
Lane Group LOS	D	C	C	D	C	C	D	C	C	D	C	C
Critical Lane Group	Yes	No	No	No	Yes	No	No	No	Yes	No	No	No
50th-Percentile Queue Length [veh/ln]	3.16	7.69	2.70	5.00	10.30	2.78	1.28	12.20	11.84	1.55	8.84	8.53
50th-Percentile Queue Length [ft/ln]	78.93	192.37	67.57	125.02	257.48	69.42	32.08	304.92	296.09	38.68	221.10	213.33
95th-Percentile Queue Length [veh/ln]	5.68	12.24	4.87	8.67	15.56	5.00	2.31	17.92	17.49	2.79	13.72	13.32
95th-Percentile Queue Length [ft/ln]	142.08	306.10	121.63	216.71	389.05	124.95	57.75	448.11	437.19	69.63	343.03	333.10

Movement, Approach, & Intersection Results

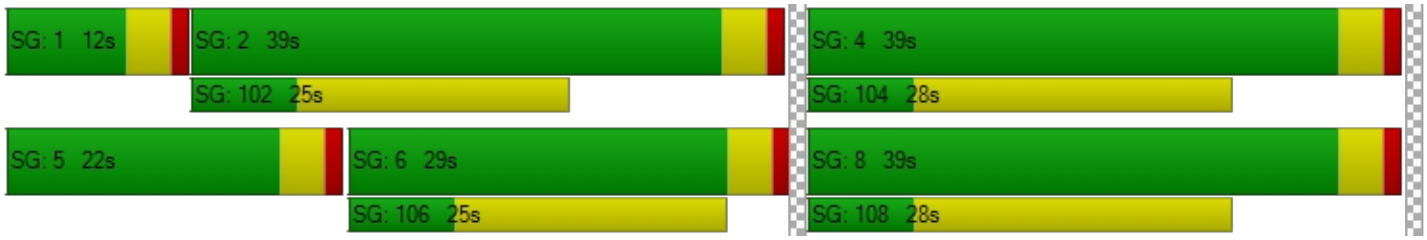
d_M, Delay for Movement [s/veh]	48.90	28.65	23.49	45.18	28.37	20.28	38.38	31.68	31.91	47.25	25.34	25.39
Movement LOS	D	C	C	D	C	C	D	C	C	D	C	C
d_A, Approach Delay [s/veh]	30.25			29.79			32.02			26.69		
Approach LOS	C			C			C			C		
d_I, Intersection Delay [s/veh]	29.80											
Intersection LOS	C											
Intersection V/C	0.798											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
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]	34.70	34.70	34.70	34.70
l_p,int, Pedestrian LOS Score for Intersection	2.928	2.933	2.769	2.778
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	555	777	777	777
d_b, Bicycle Delay [s]	23.49	16.83	16.83	16.83
l_b,int, Bicycle LOS Score for Intersection	2.470	2.767	2.573	2.415
Bicycle LOS	B	C	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



APPENDIX D

PROJECT DRIVEWAY LEVEL OF SERVICE CALCULATION WORKSHEETS

APPENDIX D-I

EXISTING WITH AMBIENT GROWTH (YEAR 2028) WITH PROJECT TRAFFIC CONDITIONS

Intersection Level Of Service Report
Intersection 28: Project Driveway A at Fashion Way

Control Type:	Two-way stop	Delay (sec / veh):	9.9
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.015

Intersection Setup

Name	Project Driveway A		Fashion Way		Fashion Way	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Project Driveway A		Fashion Way		Fashion Way	
Base Volume Input [veh/h]	11	23	78	3	3	256
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	11	23	78	3	3	256
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]	3	6	20	1	1	64
Total Analysis Volume [veh/h]	11	23	78	3	3	256
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Yes		
Number of Storage Spaces in Median	1	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.02	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.92	8.67	0.00	0.00	7.38	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.12	0.12	0.00	0.00	0.01	0.00
95th-Percentile Queue Length [ft/ln]	2.89	2.89	0.00	0.00	0.15	0.00
d_A, Approach Delay [s/veh]	9.08		0.00		0.09	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.88					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 29: Madrona Avenue at Project Driveway B

Control Type:	Two-way stop	Delay (sec / veh):	26.2
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.066

Intersection Setup

Name	Madrona Avenue		Madrona Avenue		Project Driveway B	
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 Entry Pocket	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name	Madrona Avenue		Madrona Avenue		Project Driveway B	
Base Volume Input [veh/h]	9	1152	1110	7	12	31
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	9	1152	1110	7	12	31
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]	2	288	278	2	3	8
Total Analysis Volume [veh/h]	9	1152	1110	7	12	31
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			Yes
Number of Storage Spaces in Median	0	0	1

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.01	0.01	0.00	0.07	0.08
d_M, Delay for Movement [s/veh]	15.76	0.00	0.00	0.00	26.24	14.63
Movement LOS	C	A	A	A	D	B
95th-Percentile Queue Length [veh/ln]	0.08	0.00	0.00	0.00	0.21	0.25
95th-Percentile Queue Length [ft/ln]	2.01	0.00	0.00	0.00	5.26	6.19
d_A, Approach Delay [s/veh]	0.12		0.00		17.87	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.39					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 28: Project Driveway A at Fashion Way

Control Type:	Two-way stop	Delay (sec / veh):	13.2
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.011

Intersection Setup

Name	Project Driveway A		Fashion Way		Fashion Way	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Project Driveway A		Fashion Way		Fashion Way	
Base Volume Input [veh/h]	5	10	531	8	8	385
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	5	10	531	8	8	385
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]	1	3	133	2	2	96
Total Analysis Volume [veh/h]	5	10	531	8	8	385
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Yes		
Number of Storage Spaces in Median	1	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.01	0.01	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	13.23	10.10	0.00	0.00	8.54	0.00
Movement LOS	B	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.08	0.08	0.00	0.00	0.02	0.00
95th-Percentile Queue Length [ft/ln]	1.92	1.92	0.00	0.00	0.59	0.00
d_A, Approach Delay [s/veh]	11.14		0.00		0.17	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.25					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 29: Madrona Avenue at Project Driveway B

Control Type:	Two-way stop	Delay (sec / veh):	43.5
Analysis Method:	HCM 7th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.051

Intersection Setup

Name	Madrona Avenue		Madrona Avenue		Project Driveway B	
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 Entry Pocket	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name	Madrona Avenue		Madrona Avenue		Project Driveway B	
Base Volume Input [veh/h]	21	1152	1541	16	5	14
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 Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	21	1152	1541	16	5	14
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]	5	288	385	4	1	4
Total Analysis Volume [veh/h]	21	1152	1541	16	5	14
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			Yes
Number of Storage Spaces in Median	0	0	1

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.01	0.02	0.00	0.05	0.05
d_M, Delay for Movement [s/veh]	24.16	0.00	0.00	0.00	43.47	18.00
Movement LOS	C	A	A	A	E	C
95th-Percentile Queue Length [veh/ln]	0.33	0.00	0.00	0.00	0.16	0.15
95th-Percentile Queue Length [ft/ln]	8.27	0.00	0.00	0.00	3.95	3.78
d_A, Approach Delay [s/veh]	0.43		0.00		24.71	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.36					
Intersection LOS	E					

APPENDIX E

QUEUING EVALUATION WORKSHEETS

APPENDIX E-I

EXISTING WITH AMBIENT GROWTH (YEAR 2028) WITH PROJECT TRAFFIC CONDITIONS

Intersection Level Of Service Report
Intersection 13: Madrona Avenue at Fashion Way

Control Type:	Signalized	Delay (sec / veh):	6.3
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.328

Intersection Setup

Name	Madrona Avenue		Madrona Avenue			Fashion Way	
Approach	Northbound		Southbound			Eastbound	
Lane Configuration							
Turning Movement	Left	Thru	U-turn	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	0	1	1	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00			30.00	
Grade [%]	0.00		0.00			0.00	
Curb Present	No		No			No	
Crosswalk	Yes		No			Yes	

Volumes

Name	Madrona Avenue		Madrona Avenue			Fashion Way	
Base Volume Input [veh/h]	96	1162	2	1121	163	72	29
Base Volume Adjustment Factor	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
Proportion of CAVs [%]	0.00						
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	96	1162	2	1121	163	72	29
Peak Hour Factor	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
Total 15-Minute Volume [veh/h]	24	291	1	280	41	18	7
Total Analysis Volume [veh/h]	96	1162	2	1121	163	72	29
Presence of On-Street Parking	No	No	No		No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protected	Permissive	Protected	Permissive	Overlap	Permissive	Permissive
Signal Group	1	6	5	2	2	3	0
Auxiliary Signal Groups					2,3		
Lead / Lag	Lead	-	Lead	-	-	Lead	-
Minimum Green [s]	6	6	6	6	6	6	0
Maximum Green [s]	30	30	30	30	30	30	0
Amber [s]	3.0	3.0	3.0	3.0	3.0	3.0	0.0
All red [s]	1.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	10	41	10	41	41	39	0
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	0	0	7	7	7	0
Pedestrian Clearance [s]	0	0	0	18	18	28	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No		No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall	No	No	No	No	No	No	
Maximum Recall	No	No	No	No	No	No	
Pedestrian Recall	No	No	No	No	No	No	
Detector Location [ft]	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
I, Upstream Filtering Factor	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	L	C	R	L	R
C, Cycle Length [s]	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	6	72	0	67	77	6	6
g / C, Green / Cycle	0.06	0.80	0.00	0.74	0.85	0.07	0.07
(v / s)_i Volume / Saturation Flow Rate	0.04	0.23	0.00	0.22	0.10	0.03	0.02
s, saturation flow rate [veh/h]	2621	5094	1781	5094	1589	2621	1589
c, Capacity [veh/h]	162	4050	8	3759	1350	176	107
d1, Uniform Delay [s]	41.15	2.45	44.66	3.97	1.14	40.29	39.91
k, delay calibration	0.11	0.50	0.11	0.50	0.50	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]	3.45	0.18	15.06	0.20	0.18	1.52	1.35
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	0.59	0.29	0.25	0.30	0.12	0.41	0.27
d, Delay for Lane Group [s/veh]	44.59	2.63	59.72	4.17	1.32	41.81	41.26
Lane Group LOS	D	A	E	A	A	D	D
Critical Lane Group	Yes	No	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	1.10	1.18	0.08	1.82	0.23	0.79	0.64
50th-Percentile Queue Length [ft/ln]	27.59	29.44	1.95	45.43	5.65	19.86	16.11
95th-Percentile Queue Length [veh/ln]	1.99	2.12	0.14	3.27	0.41	1.43	1.16
95th-Percentile Queue Length [ft/ln]	49.66	52.98	3.51	81.77	10.18	35.75	29.00

Movement, Approach, & Intersection Results

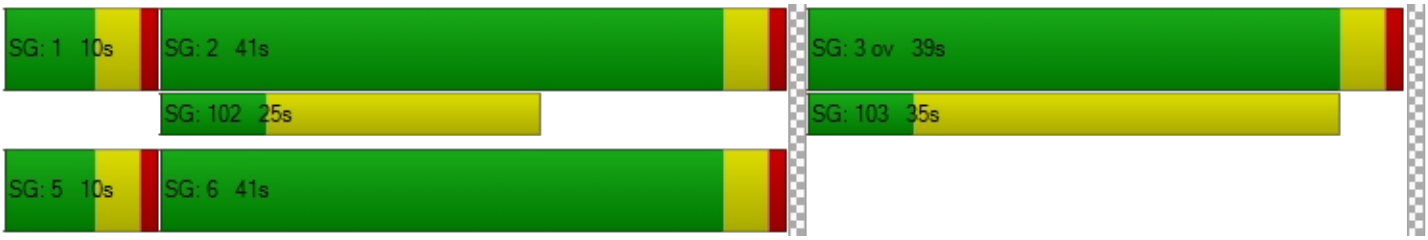
d_M, Delay for Movement [s/veh]	44.59	2.63	59.72	4.17	1.32	41.81	41.26
Movement LOS	D	A	E	A	A	D	D
d_A, Approach Delay [s/veh]	5.83		3.89			41.65	
Approach LOS	A		A			D	
d_I, Intersection Delay [s/veh]	6.26						
Intersection LOS	A						
Intersection V/C	0.328						

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	11.0
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]	34.68	0.00	34.68
l_p,int, Pedestrian LOS Score for Intersection	3.018	0.000	2.370
Crosswalk LOS	C	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	822	822	778
d_b, Bicycle Delay [s]	15.62	15.62	16.82
l_b,int, Bicycle LOS Score for Intersection	2.252	2.267	1.560
Bicycle LOS	B	B	A

Sequence

Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 13: Madrona Avenue at Fashion Way

Control Type:	Signalized	Delay (sec / veh):	13.2
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.510

Intersection Setup

Name	Madrona Avenue		Madrona Avenue			Fashion Way	
Approach	Northbound		Southbound			Eastbound	
Lane Configuration							
Turning Movement	Left	Thru	U-turn	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	0	1	1	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00			30.00	
Grade [%]	0.00		0.00			0.00	
Curb Present	No		No			No	
Crosswalk	Yes		No			Yes	

Volumes

Name	Madrona Avenue		Madrona Avenue			Fashion Way	
Base Volume Input [veh/h]	75	1059	15	1356	318	307	234
Base Volume Adjustment Factor	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
Proportion of CAVs [%]	0.00						
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	75	1059	15	1356	318	307	234
Peak Hour Factor	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
Total 15-Minute Volume [veh/h]	19	265	4	339	80	77	59
Total Analysis Volume [veh/h]	75	1059	15	1356	318	307	234
Presence of On-Street Parking	No	No	No		No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protected	Permissive	Protected	Permissive	Overlap	Permissive	Permissive
Signal Group	1	6	5	2	2	3	0
Auxiliary Signal Groups					2,3		
Lead / Lag	Lead	-	Lead	-	-	Lead	-
Minimum Green [s]	6	6	6	6	6	6	0
Maximum Green [s]	30	30	30	30	30	30	0
Amber [s]	3.0	3.0	3.0	3.0	3.0	3.0	0.0
All red [s]	1.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	10	29	10	29	29	51	0
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	0	0	7	7	7	0
Pedestrian Clearance [s]	0	0	0	18	18	28	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No		No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall	No	No	No	No	No	No	
Maximum Recall	No	No	No	No	No	No	
Pedestrian Recall	No	No	No	No	No	No	
Detector Location [ft]	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
I, Upstream Filtering Factor	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	L	C	R	L	R
C, Cycle Length [s]	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	5	59	2	56	77	17	17
g / C, Green / Cycle	0.06	0.65	0.02	0.62	0.85	0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.03	0.21	0.01	0.27	0.20	0.12	0.15
s, saturation flow rate [veh/h]	2621	5094	1781	5094	1589	2621	1589
c, Capacity [veh/h]	151	3329	39	3149	1357	501	304
d1, Uniform Delay [s]	41.17	6.82	43.42	8.95	1.21	33.38	34.55
k, delay calibration	0.11	0.50	0.11	0.50	0.50	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]	2.52	0.25	5.94	0.43	0.41	1.22	4.14
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	0.50	0.32	0.38	0.43	0.23	0.61	0.77
d, Delay for Lane Group [s/veh]	43.69	7.07	49.36	9.38	1.61	34.60	38.69
Lane Group LOS	D	A	D	A	A	C	D
Critical Lane Group	Yes	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.85	2.64	0.39	4.22	0.46	3.10	5.11
50th-Percentile Queue Length [ft/ln]	21.29	66.10	9.79	105.50	11.41	77.54	127.75
95th-Percentile Queue Length [veh/ln]	1.53	4.76	0.70	7.59	0.82	5.58	8.82
95th-Percentile Queue Length [ft/ln]	38.33	118.97	17.62	189.72	20.54	139.57	220.44

Movement, Approach, & Intersection Results

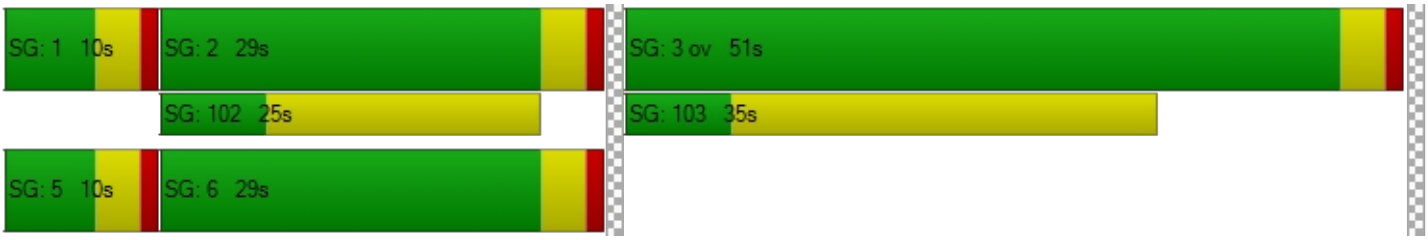
d_M, Delay for Movement [s/veh]	43.69	7.07	49.36	9.38	1.61	34.60	38.69
Movement LOS	D	A	D	A	A	C	D
d_A, Approach Delay [s/veh]	9.49		8.27			36.37	
Approach LOS	A		A			D	
d_I, Intersection Delay [s/veh]	13.20						
Intersection LOS	B						
Intersection V/C	0.510						

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	11.0
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]	34.68	0.00	34.68
l_p,int, Pedestrian LOS Score for Intersection	3.057	0.000	2.481
Crosswalk LOS	C	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	555	555	1044
d_b, Bicycle Delay [s]	23.48	23.48	10.28
l_b,int, Bicycle LOS Score for Intersection	2.183	2.489	1.560
Bicycle LOS	B	B	A

Sequence

Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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TECHNICAL MEMORANDUM

To:	Helen Shi, P.E., Engineering Manager City of Torrance – Public Works Department	Date:	September 13, 2024 *(original dated March 14, 2024)*
Cc:	Jessamine Que, Associate Engineer City of Torrance, Public Works Department		
From:	Richard Barretto, P.E., Principal Zawwar Saiyed, P.E., Associate Principal Yi Li, Transportation Engineer I Linscott, Law and Greenspan, Engineers	LLG Ref:	2.20.4363.1
Subject:	***Revised Vehicle Miles Traveled (VMT) Screening Assessment for the Proposed Lennar Del Amo Project, Torrance***		

As requested, Linscott, Law & Greenspan, Engineers (LLG) is pleased to submit this Revised Vehicle Miles Traveled (VMT) Screening Assessment Technical Memorandum for the proposed Lennar Del Amo Project (herein after referred to as "Project") in the City of Torrance, Los Angeles County, California. This Technical Memorandum has been updated to address comments by City staff on March 2024 assessment and reflect the current Project development totals. The Technical Memorandum presents the VMT screening criteria and it should be noted that the criteria, approach and methodology outlined in this Technical Memorandum is consistent with the *City of Torrance Traffic Impact Assessment Guidelines for Land Use Projects (dated January 2021)*, which provides additional detail on the language and analysis procedures described in this Technical Memorandum.

The following sections of this Technical Memorandum summarize the Project description, present the City of Torrance's VMT screening criteria, analysis methodology and thresholds, and the conclusion.

PROJECT DESCRIPTION

The Project site is a rectangular-shaped 16.37± acre parcel of lant that is located on the northeast quadrant of the Del Amo Fashion Center Mall, located South of Fashion Way, West of Madrona Avenue, North of West Carson Street, and East of Del Amo Circle in the City of Torrance, California. The subject property is located within the Hawthorne Boulevard Corridor Specific Plan Area DA-1- "Del Amo Sub-Business District One" implementing the City of Torrance 2021 Housing Element of the General Plan." The site was a former parking lot for the mall and includes an office/laboratory building in the northeast corner of the property, occupied by Neoteryx, and a Black Angus Steakhouse restaurant in the southeast corner of the property.

Access to the Project site is now provided by two (2) driveways on Madrona Avenue, one "right-turn only" driveway, and one "full access" driveway, two (2) "full access"

driveways on Del Amo Circle E. and two (2) driveways on Fashion Way, of which the western driveway is right-turn only and the easternly driveway is exit-only (left and right). Both driveways on Fashion Way are currently closed to the public. No vehicular access from Carson Street is now allowed. It should be noted that the existing driveway on Fashion Way is gated and closed for public access.

Figure 1 presents a vicinity map that illustrates the general location of the Project site and surrounding street system. ***Figure 2*** displays the existing site aerial of current site layout.

The proposed Project includes the demolition of the existing Neoteryx building and Black Angus Steakhouse restaurant and the construction of a new medium density "ownership" condominium community adjoining the Del Amo Fashion Center mall. The proposed mix of residential uses would include two-story townhomes, three-story townhomes and four-story townhomes, with a mix of two-bedroom units, three-bedrooms units and four-bedroom units. Parking for the Project would be provided via combination of garage spaces, on-site surface parking, and/or on-street parking within the subject property.

Multifamily residential uses, like the proposed Project, are conditionally permitted in the Hawthorne Boulevard Corridor Specific Plan – Del Amo Sub-district 1 (HBCSP DA-1 Zone), and are permitted in the Commercial Center (C-CTR) land use designation. Further the proposed development is consistent with the Southern California Association of Governments (SCAG) - Regional Transportation Plan or Sustainable Communities Strategy (RTP/SCS).

Appendix A contains the correspondence with a City of Torrance confirming that the project is consistent with SCAG RTP/SCS.

The most recent site plan prepared by KTGY Architecture + Planning indicates a reduced project description from what was reported in the March 14, 2024 VMT Study. Although the updated Traffic Study continues to conservatively assess the larger project option which consisted of up to 272 dwelling units, it is considered more appropriate to use the currently proposed Project total when assessing the VMT implications.

As such, based on a review of the current Project site plan, the proposed Project includes construction of a 260 multifamily residential DU community, consisting of three-story townhomes and four-story townhomes, with a mix of 52 one-bedroom and two-bedroom units and 208 three-bedrooms units. Based on the current site plan, parking for the Project totals 699 spaces and consists of a combination of 520 garage spaces and 179 surface parking/driveway parking spaces within the subject property.

Vehicular access would be provided via a full access unsignalized driveway located on Madrona Avenue and a "full access" unsignalized driveway on Fashion Way. ***Figure 3*** presents the proposed Project site plan prepared by KTGY Architecture + Planning dated August 26, 2024.

PROJECT SCREENING CRITERIA

Under the VMT methodology, screening is used to determine if a project will be required to conduct a detailed VMT analysis. The following section discusses the various screening methods recommended by the *City of Torrance Traffic Impact Assessment Guidelines for Land Use Projects (dated January 2021),* as well as direction by City of Torrance staff, and whether the Project will screen-out, either in its entirety, or partially based on individual land uses.

The Department of Transportation (Caltrans) has also formally adopted VMT as the metric for reviewing the transportation impacts of a land use development project. Caltrans has released the Vehicle Miles Traveled-Focused *Transportation Impact Study Guide (TISG)*, dated May 20, 2020 in order to provide guidance on Caltrans' review of land use projects.

Caltrans' TISG references the *Technical Advisory on Evaluating Transportation Impacts In California Environmental Quality Act* (CEQA), dated December 2018, prepared by the State of California Governor's Office of Planning and Research (OPR) as the basis for its guidance on VMT assessment. The City of Torrance adopted new traffic impact criteria to be consistent with the CEQA revisions and OPR recommendations. These new guidelines are contained within the *City of Torrance Traffic Impact Assessment Guidelines for Land Use Projects (dated January 2021)*, and provide screening criteria and methodology for VMT analysis. Since the City's guidelines are generally consistent with OPR guidelines, no separate VMT analysis has been prepared for Caltrans' review of the proposed project.

It should be noted that the Project is located in Traffic Analysis Zone (TAZ) 21275100 of the Southern California Association of Governments Regional Travel Demand Model (SCAG RTDM). ***Figure 4*** presents the TAZ Map from SCAG RTDM.

It is our understanding that this Project is consistent with the *Southern California Association of Governments Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)* and Project threshold screening presumption applies under cumulative conditions, as will be confirmed by the City staff.

Finally, since the Project doesn't impact transit systems and bicycle and pedestrian networks, no further evaluation is necessary.

The criteria below presents the various screening methods recommended by the *City of Torrance Traffic Impact Assessment Guidelines for Land Use Projects (dated January 2021)* to determine if the Project will screen out:

Small Projects

The *City of Torrance Traffic Impact Assessment Guidelines for Land Use Projects (dated January 2021)* presents:

- *Criteria: Will the Project generate a net increase of 110 or less daily trips?*

As presented in ***Table 1***, the proposed Project, assuming development of a 260 DU residential community, is forecast to generate 968 trips on a typical weekday.

*Based on the above, the proposed Project **will not** screen-out since it generates more than 110 net daily trips.*

Map-Based Screening for Residential and Office Projects

Based on the *City of Torrance Traffic Impact Assessment Guidelines for Land Use Projects (dated January 2021),* the residential and office projects located in areas with low VMT, and that incorporate similar features (i.e., density, mix of uses, transit accessibility), will tend to exhibit similarly low VMT.

- *Criteria: Is the Project a residential project in a low VMT per capita area or an office project in a low VMT per employee area?*

*Based on the above, the proposed Project **will not** screen-out since it is not located in a low VMT area as presented in the **Figure 5** (Figure 8 - TAZs with Low (85% or less than 2021 LA County Average) VMT per Capita, Page 13, City of Torrance Traffic Impact Assessment Guidelines for Land Use Projects (dated January 2021)).*

Proximity to Transit Screening

The *City of Torrance Traffic Impact Assessment Guidelines for Land Use Projects (dated January 2021)* states:

- *Criteria: Is the Project located within one-mile of either an existing major transit stop or an existing stop along an existing high quality transit corridor?*

Further, The *City of Torrance Traffic Impact Assessment Guidelines for Land Use Projects (dated January 2021)* states:

> *"This transit-based screening criteria cannot be utilized if a project has at least one of the following limiting factors:*

1. *Has a Floor Area Ratio (FAR) of less than 0.75;*
2. *Includes more parking for use by residents, customers, or employees of the project than required by the City;*
3. *Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the City of Brea, with input from the Southern California Association of Governments [SCAG]); or*
4. *Replaces affordable residential units with a smaller number of moderate- or high-income residential units."*

Transit Priority Area (TPA) Assessment

"Major transit stop" means a site containing an existing rail or bus rapid transit station; a ferry terminal served by either a bus or rail transit service; or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

A high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.

The City provided a Transit Priority Area (TPA) map illustrating a one-half mile radius from existing transit stops and stops along high quality transit corridors. ***Figure 6*** *(Figure 10 - Transit Priority Area Map, Page 16, City of Torrance Traffic Impact Assessment Guidelines for Land Use Projects (dated January 2021))* displays the Project TAZ within the TPA map. As presented in this figure, the entire proposed Project site is located within a TPA.

Floor Area Ratio (FAR) Assessment

Floor Area Ratio (FAR) is the relationship between the total amount of usable floor area of a development and the total area of the development lot.

Based on the Project development information, the proposed 260 DU residential project is comprised of 691,309 total SF of residential building area. Based on a parcel size of 16.37 acres (equivalent to 713,077 SF), the FAR for the Project can be calculated as follows:

$$Project\ FAR = \frac{691{,}309\ SF}{713{,}077\ SF} = 0.97$$

Based on the above calculation, the proposed Project has a FAR greater than 0.75.

Appendix B contains the proposed Project site plan indicating that the project FAR is 0.97.

Parking Assessment

The proposed Project has 52 units (1-bedroom and 2-bedroom units) and 208 units (3+ bedroom units) for a total of 260 units. In accordance with the *Torrance Municipal Code (Division 9 Land Use: Chapter 3 Off Street Parking),* the proposed Project requires 728 parking spaces, and an additional 65 guest parking spaces are required. Direct application of the City parking code results in a total code-base parking requirement of 793 parking spaces. The proposed Project provides 520 garage spaces, 155 on-site surface parking, and 24 private driveways for a total supply of 699 parking spaces.

When compared against the proposed parking supply of 699 parking spaces, the Project provides less parking than City-code requirement of 793 spaces.

Sustainable Communities Strategy Assessment

The proposed Project, as confirmed by City staff, is consistent with the applicable *SCAG - RTP/SCS*. As previously mentioned, *Appendix A* includes this correspondence with the City related to consistency.

Affordable Housing Assessment

The proposed Project does not replace affordable residential units with a smaller number of moderate or high-income residential units since all the replacement uses are non-residential.

*Based on the above, the proposed Project **will** screen-out since it is located within a TPA and has no limiting factors as detailed above. Therefore, it can be concluded that the proposed Project would be screened out from a VMT assessment and its VMT impacts are presumed to be less than significant.*

Affordable Residential Development Screening

The *City of Torrance Traffic Impact Assessment Guidelines for Land Use Projects (dated January 2021)* states:

- *Criteria: Is the Project 100% affordable housing units?*

*Based on the above, the proposed Project **will not** screen-out since the proposed Project is not 100% affordable housing units.*

Local-Serving Retail Screening

The *City of Torrance Traffic Impact Assessment Guidelines for Land Use Projects (dated January 2021)* states:

- *Criteria: Does the Project contain a retail use of 50,000 SF or less?*

*Based on the above, the proposed Project **will not** screen-out since the proposed Project is not local-serving retail project.*

Local-Serving Public Facility

The *City of Torrance Traffic Impact Assessment Guidelines for Land Use Projects (dated January 2021)* states:

- *Criteria: Is the Project a locally serving public facility?*

*Based on the above, the proposed Project **will not** screen-out since the proposed Project is not local-serving public facility.*

CONCLUSION

Based on the Vehicle Miles Traveled (VMT) Screening Assessment and the *City of Torrance Traffic Impact Assessment Guidelines for Land Use Projects (dated January 2021),* this proposed Project will screen-out due to its proximity to transit. The Project site is located within a TPA, and therefore, the proposed Project can be presumed to have VMT impacts that are less than significant and have no significant CEQA related transportation impacts. As such, no further VMT analysis is necessary or required.

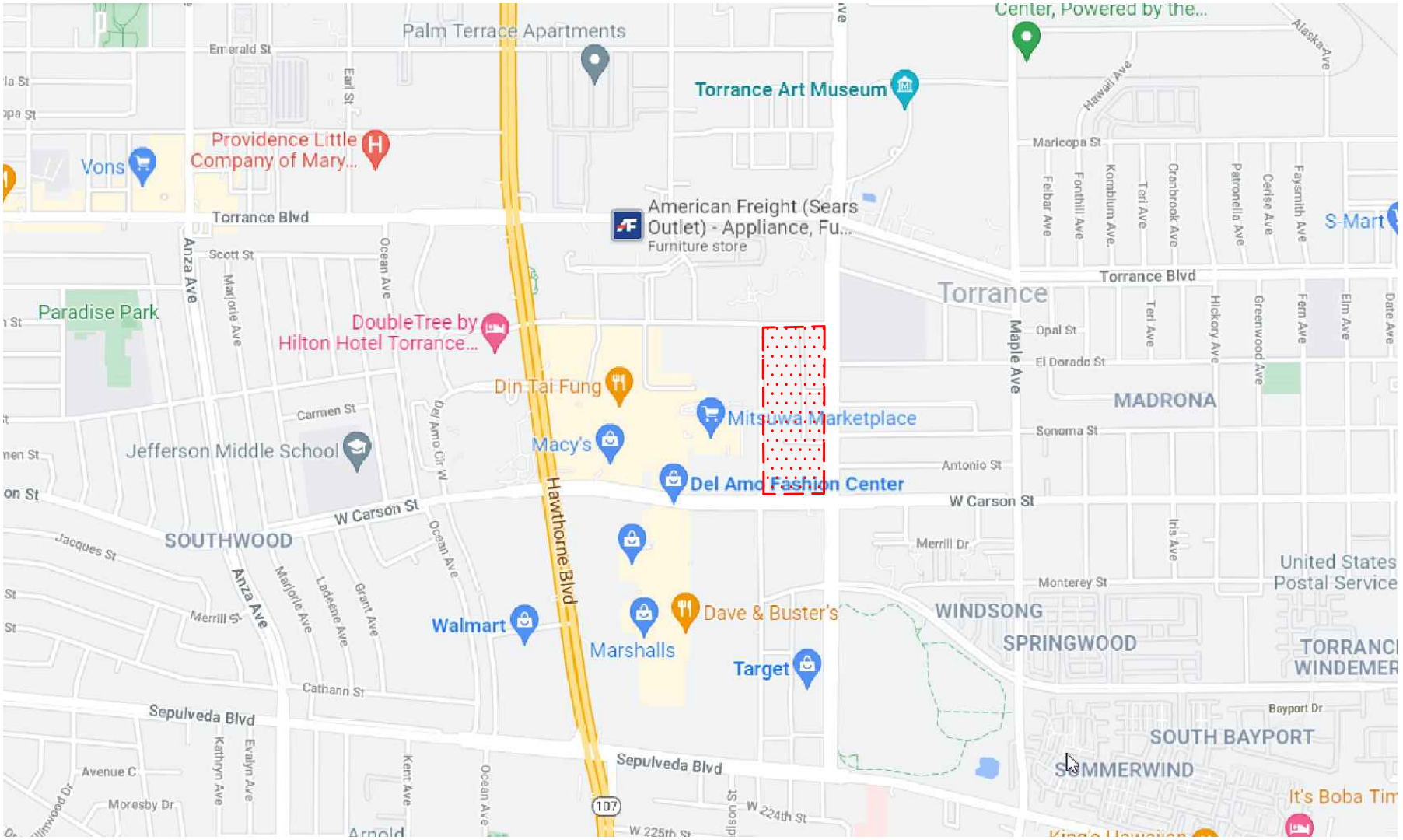
* * * * * * * * * * *

We appreciate the opportunity to provide this Technical Memorandum. Should you have any questions regarding the memorandum, please contact us at (949) 825-6175.

cc: File







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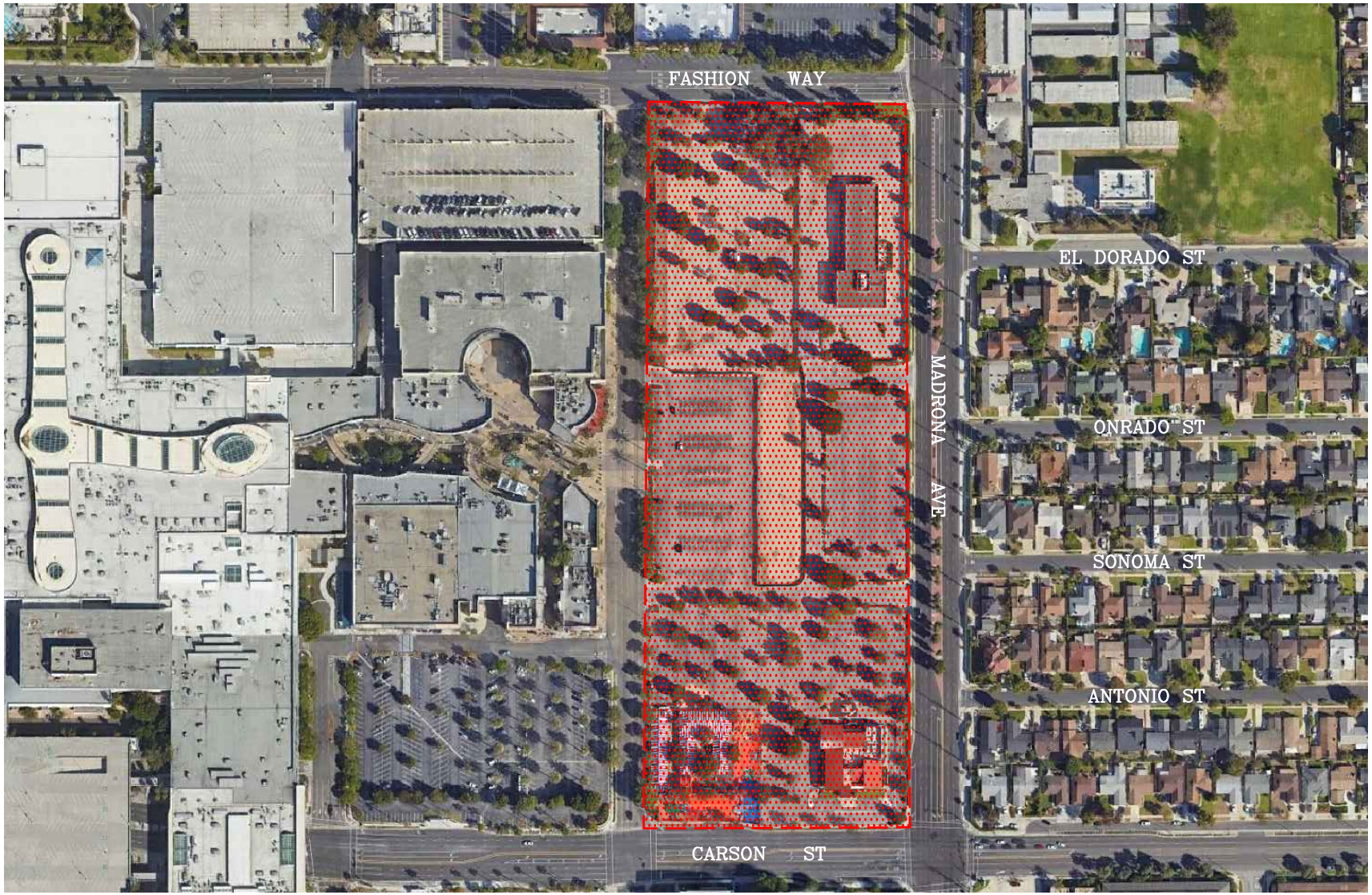
= PROJECT SITE

NO SCALE

FIGURE 1

VICINITY MAP

LENNAR DEL AMO, TORRANCE



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SOURCE: GOOGLE

KEY

= PROJECT SITE

NO SCALE

FIGURE 2

EXISTING SITE AERIAL

LENNAR DEL AMO, TORRANCE



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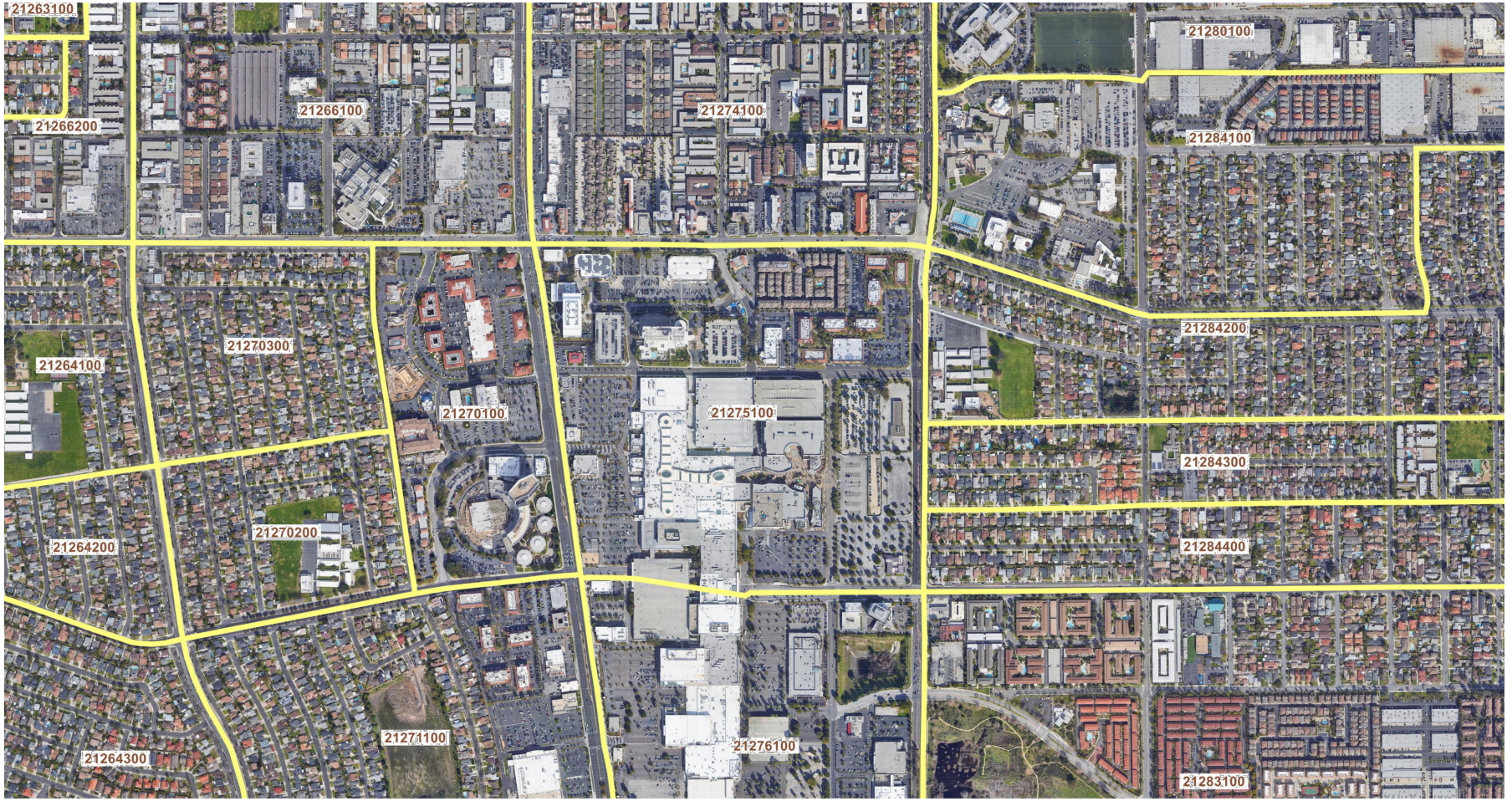
SOURCE: KTGY

NO SCALE

FIGURE 3

PROPOSED SITE PLAN

LENNAR DEL AMO, TORRANCE



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SOURCE: SCAG

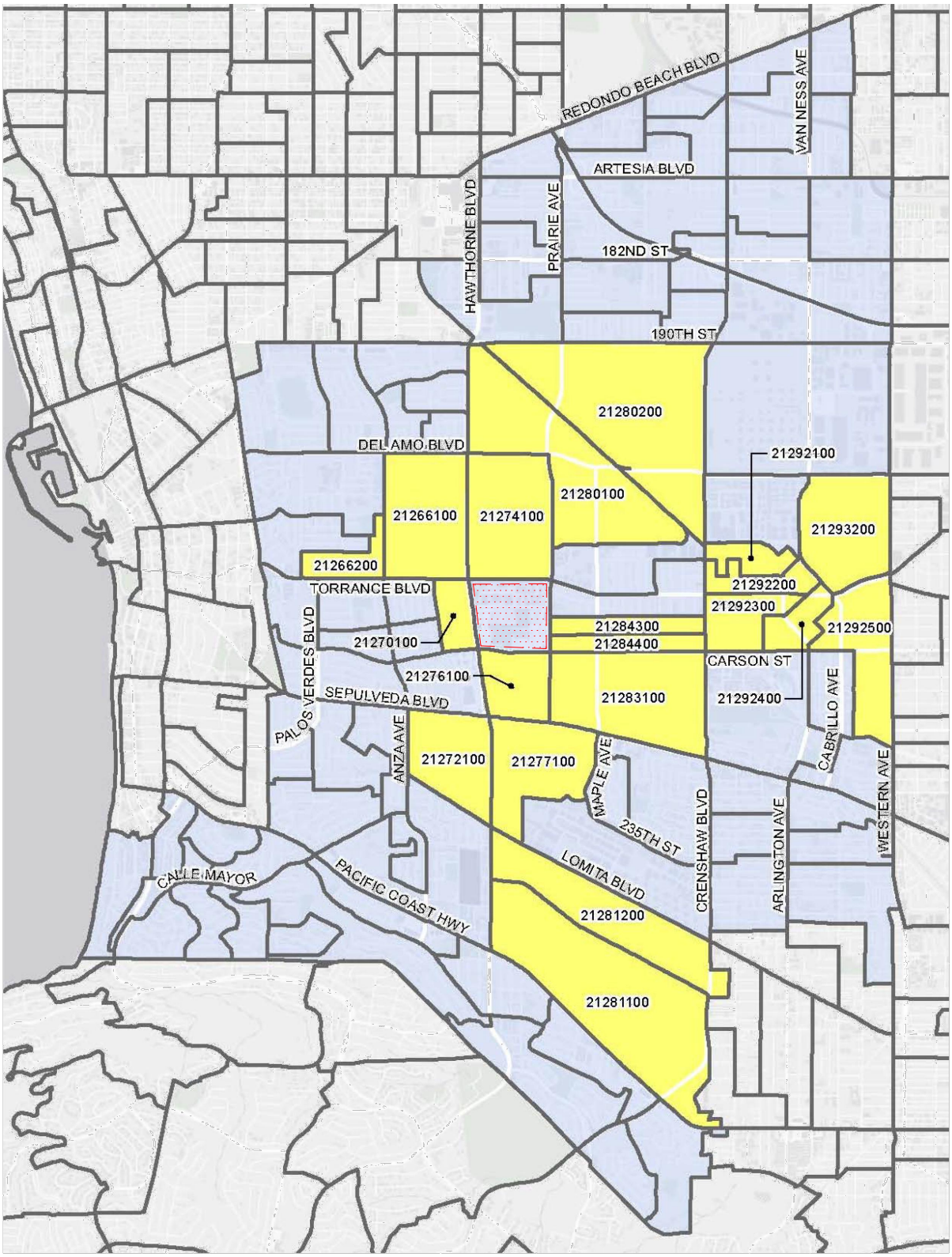
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N NO SCALE

FIGURE 4

TAZ MAP

LENNAR DEL AMO, TORRANCE



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SOURCE: FIGURE 8 – TAZs WITH LOW (85% OR LESS THAN 2021 LA COUNTY AVERAGE) VMT PER CAPITA, PAGE 13, CITY OF TORRANCE TRAFFIC IMPACT ASSESSMENT GUIDELINES FOR LAND USE PROJECTS (DATED JANUARY 2021)

FIGURE 5

KEY

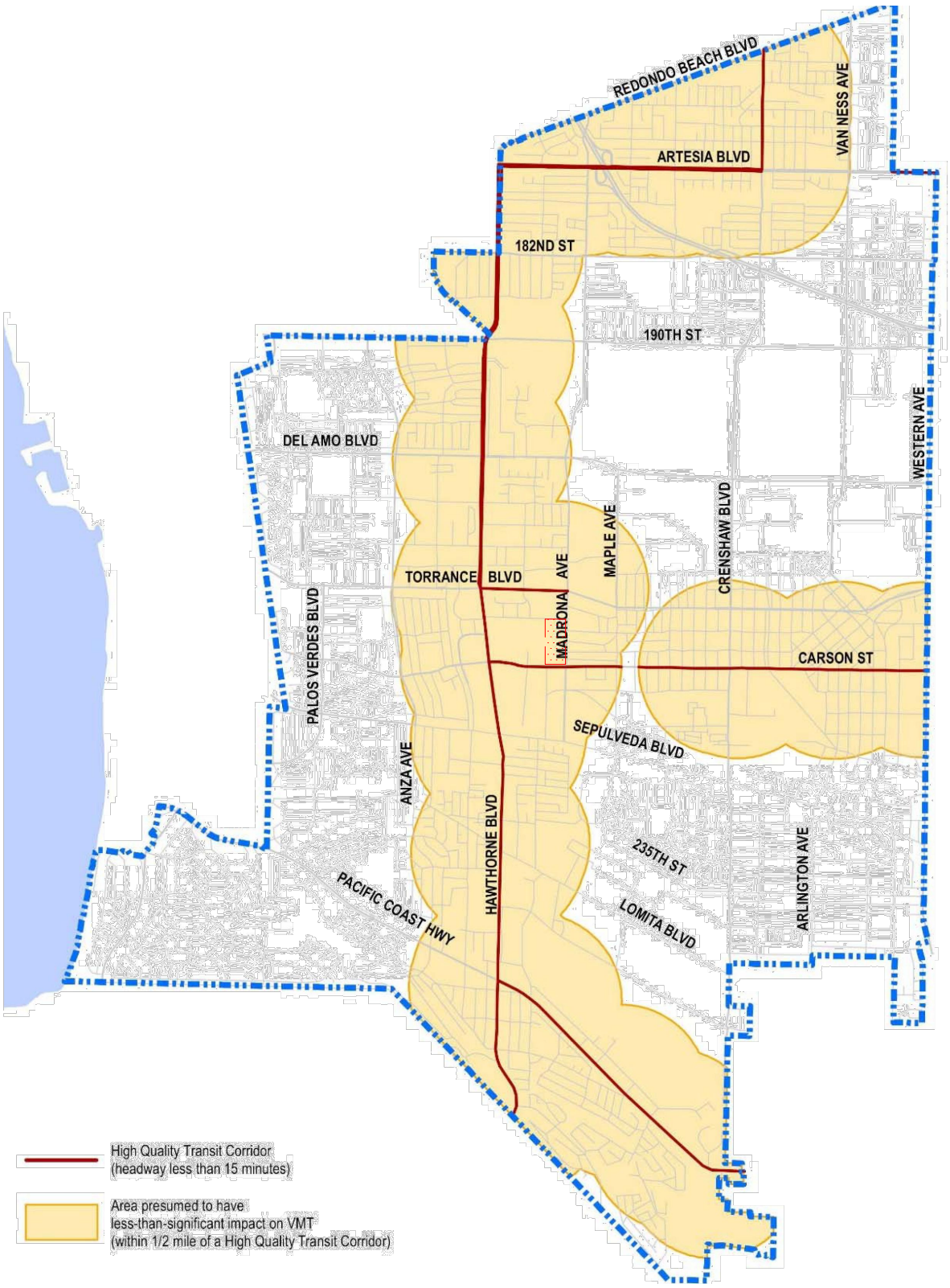
= PROJECT SITE TAZ

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NO SCALE

LOW VMT AREA SCREENING MAP

LENNAR DEL AMO, TORRANCE



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SOURCE: FIGURE 10 – TRANSIT PRIORITY AREA MAP, PAGE 16, CITY OF TORRANCE TRAFFIC IMPACT ASSESSMENT GUIDELINES FOR LAND USE PROJECTS (DATED JANUARY 2021)

FIGURE 6

LLG

N

NO SCALE

KEY

= PROJECT SITE

TPA SCREENING MAP

LENNAR DEL AMO, TORRANCE

TABLE 1
PROJECT TRAFFIC GENERATION RATES AND FORECAST[1]

Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
Proposed Trip Generation Rates:							
▪ ITE 221: Multifamily Housing Mid Rise Not Close to Rail Transit (TE/DU)	4.54	23%	77%	0.37	61%	39%	0.39
Proposed Trip Generation Forecast:							
▪ Multifamily Housing Mid Rise (260 DU)	1,180	22	74	96	62	39	101
Internal Capture Reduction (Daily: 18%, AM 2%, PM 18%)[2]	*-222*	*0*	*-2*	*-2*	*-11*	*-7*	*-18*
Total Proposed Project Trip Generation	**968**	**22**	**72**	**94**	**51**	**32**	**83**

1 Source: *Trip Generation*, 11th Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2021).

2 Based on review of the internal capture worksheets which are consistent with the *Trip Generation Handbook, 3rd Edition,* published by ITE (August 2014) along with discussions with City staff, the following internal capture reductions were conservatively applied: 18.0% Daily, 2.0% AM peak hour, and 18.0% PM peak hour. The internal capture takes into account the interaction between the existing Del Amo Fashion Center and the proposed Project.

APPENDIX A

PROJECT SCAG RTP/SCS CONFIRMATION

Christy Kopulsky

From: Que, Jessamine <JQue@TorranceCA.Gov>
Sent: Thursday, May 9, 2024 5:56 PM
To: Shane Green
Subject: Lennar Del Amo

Follow Up Flag: Follow up
Flag Status: Flagged

From: Yumul, Soc Angelo <SYumul@TorranceCA.gov>
Sent: Monday, October 31, 2022 8:25 AM
To: Que, Jessamine <JQue@TorranceCA.gov>
Subject: RE: EAS22-00001 - Technical Study Review

Thank you Jessa. I read through the draft SCEA for the project and it confirms the three bulleted items, so Planning would agree with the statements.

Please let me know if there's anything else.

Thanks again!

From: Que, Jessamine <JQue@TorranceCA.gov>
Sent: Tuesday, October 25, 2022 4:50 PM
To: Yumul, Soc Angelo <SYumul@TorranceCA.gov>
Subject: RE: EAS22-00001 - Technical Study Review

Hi, Soc.

For the TIA, the project satisfies two criteria for exemption. However they need a few statements from you:

- The project will have similar features as existing parcels in TAZ 21270100 (bounded by Torrance, Hawthorne, Carson, and Ocean) [To qualify for Map-Based Screening]
- The project does not provide more parking than what the City requires [To qualify for Proximity to Transit Screening]
- The project is consistent with SCAG RTP/SCS [To qualify for TIA exemption]

If you agree to the above, the project can be exempt from TIA preparation.

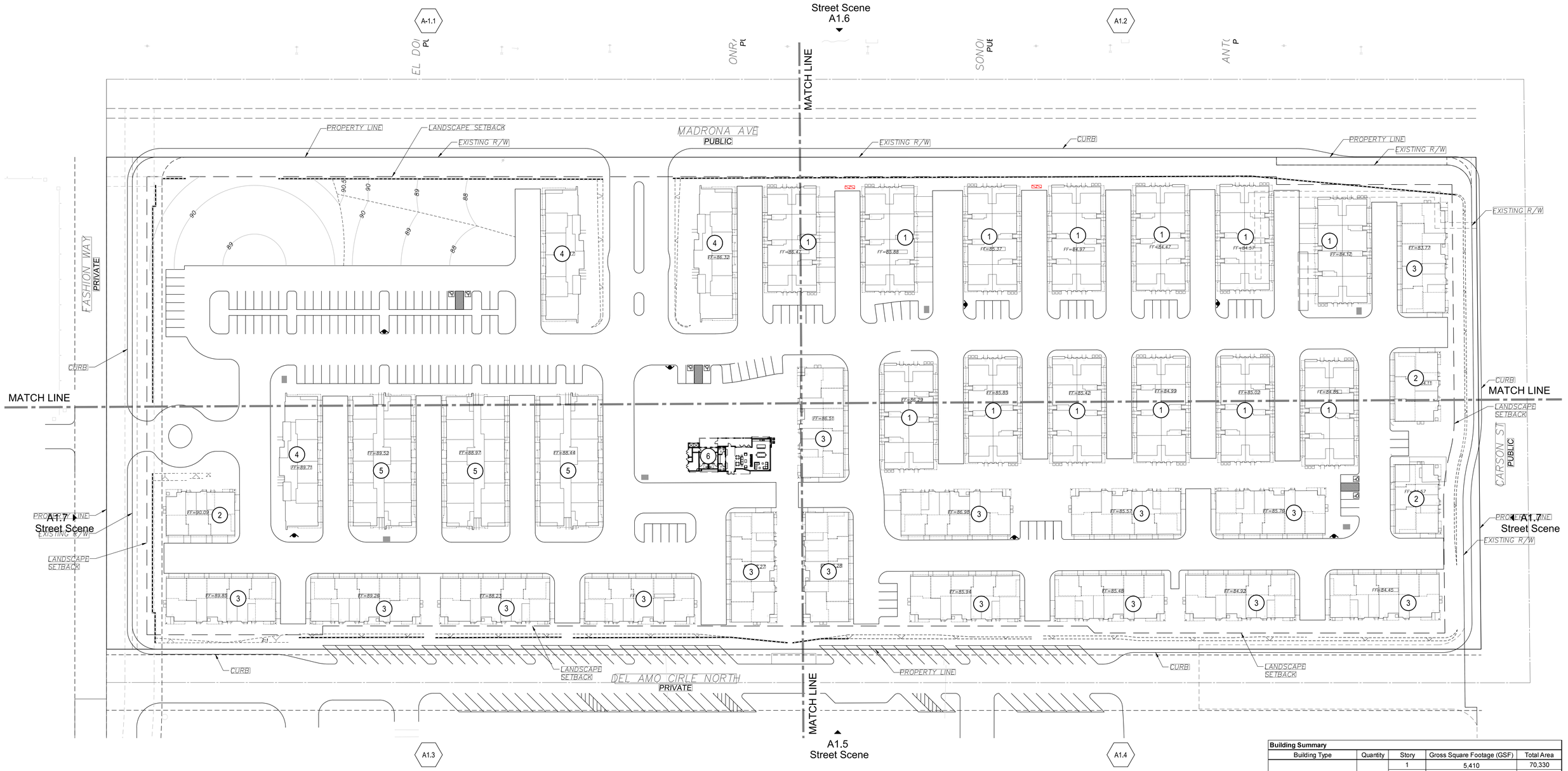
Thanks,
Jessa

JESSAMINE QUE
Associate Engineer – Public Works
City of Torrance | 20500 Madrona Avenue | Torrance CA 90503 | 310.618.3066 | 310.781.6902 fax | JQue@TorranceCA.Gov | www.TorranceCA.Gov | www.TorranceCA.Gov/SocialMedia | www.TorranceCA.Gov/COVID19



APPENDIX B

PROPOSED PROJECT SITE PLAN



Product Legend

1. Product A - Back to Back TH - 8-Plex
2. Product B - Rowtowns - 4 - Plex
3. Product B - Rowtowns - 6 - Plex
4. Product C - 6 - Unit Buildings
5. Product C - 12 - Unit Buildings
6. Rec/Pool Building

Parking Summary

Parking Required	No. Units	Spaces Required	Spaces/Unit
1 and 2 bed units	52	104	2.0
3+ bed units	208	624	3.0
Guest Parking	260	65	0.25
Total Residential Parking		793	3.1

Parking Provided	Spaces Provided	Spaces/Unit
Garage Spaces	520	
On Site Spaces	155	
Private Driveways	24	
Total On-Site Residential Parking	699	2.7

Residential Accessible Parking Required	No. Spaces	Spaces Required	Ratio
Resident Open Spaces	90	2	2.0%
Guest Spaces	65	4	5.0%
Total Accessible Spaces		6	

EV Parking Required	No. Spaces	Spaces Required	Ratio
EV	699	35	5.0%
EV Capable	699	70	10.0%
EV Ready	699	175	25.0%
Total EV Spaces		280	

Plan Summary

Plan	Beds	Unit Area	Deck Area	Quantity	%	Total Net S.F.	Avg. Net S.F.	Total Deck S.F.	Avg. Deck S.F.
Back to Back TH Plan 1	2	1356	55	52	20.0%				
Back to Back TH Plan 2	3	1532	54	52	20.0%				
Back to Back subtotal				104	40.0%				
Elevator Flats Plan 1	3	1525	131	6	2.3%				
Elevator Flats Plan 2	3	1751	159	24	9.2%				
Elevator Flats Plan 3	3	1583	133	6	2.3%				
Elevator Flats Plan 4	3	1885	544	6	2.3%				
Elevator Flats Plan 5	3	2035	322	12	4.6%				
Elevator Flats subtotal				54	20.8%				
4 story TH Plan 1	3	1393	114	18	6.9%				
4 story TH Plan 2	3	1432	167	18	6.9%				
4 story TH Plan 3	4	1999	183	15	5.8%				
4 story TH Plan 4	3	2182	228	18	6.9%				
4 story TH Plan 5	3	2342	595	18	6.9%				
4 story TH Plan 6	3	2499	666	15	5.8%				
4 story subtotal				102	39.2%				
Total				260	100%	446,330	1,717	50,803	195

Site Summary

Gross Site Area	16.37 AC	
Dwelling Units	260 DU	
Density	16 DU/AC	
FAR		0.97
Building Coverage	27.1%	193,445 SF

Type	No. Units	Mix
1 Bedroom Total	0	0.0%
2 Bedroom Total	52	20.0%
3 Bedroom Total	193	74.2%
4 Bedroom Total	15	5.8%
Total	260	100.0%

Building Summary

Building Type	Quantity	Story	Gross Square Footage (GSF)	Total Area
Back to Back TH - 8-Plex	13	1	5,410	70,330
		2	6,004	78,052
		3	5,810	75,530
		Total	**17,224**	**223,912**
Rowtowns - 4-Plex	3	1	3,075	9,225
		2	3,510	10,530
		3	3,521	10,563
		4	1,723	5,169
		Total	**11,829**	**35,487**
Rowtowns - 6-Plex	15	1	4,878	73,170
		2	5,514	82,710
		3	5,525	82,875
		4	2,351	35,265
		Total	**18,268**	**274,020**
Elevator Flats 6-Plex	3	1	4,744	14,232
		2	5,099	15,297
		3	5,099	15,297
		4	5,099	15,297
		Total	**20,041**	**60,123**
Elevator Flats 12-Plex	3	1	7,990	23,970
		2	8,843	26,529
		3	8,843	26,529
		4	8,843	8,843
		Mez	3,126	9,378
		Total	**37,645**	**95,249**
Rec/Pool Building	1	Total	**2,518**	**2,518**
Total				**691,309**

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LENNAR HOMES
15131 Alton Parkway, Suite 365
Irvine, CA 92618

DEL AMO
TORRANCE, CA # 2020-0686

SCHEMATIC DESIGN
AUGUST 26, 2024

Scale: 1" = 40'-0"
0 20 40 80

SITE PLAN
SITE PLAN OVERALL

A1.0