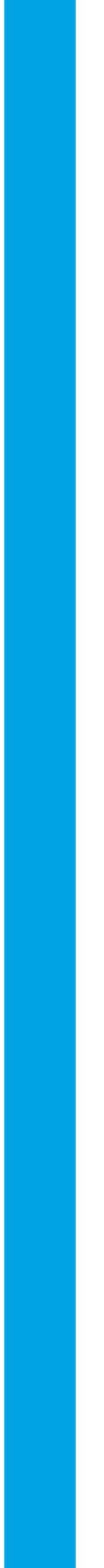


APPENDIX E – REDLANDS MARKETPLACE TRAFFIC IMPACT ANALYSIS



Redlands Marketplace Traffic Impact Analysis

Prepared for:
City of Redlands
October 14, 2025

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Table of Contents

1. Introduction	1
a) Description of the proposed project	1
b) Scope of analysis	1
2. Methodology	6
3. Existing Conditions.....	8
a) Existing roadway system	8
b) Public transit and active transportation	9
c) Existing traffic volumes	9
d) Existing intersection level of service	13
4. Project Trip Forecasts	14
a) Project trip generation	14
b) Project trip distribution & assignment.....	15
5. Existing Plus Project Conditions.....	20
a) Existing plus project volume forecasts	20
b) Existing plus project intersection level of service	20
6. Site Access	26
7. On-site Circulation.....	26
8. Queuing Analysis	26
9. Mitigations.....	27
Appendices	29
Appendix A: Scoping Memorandum	30
Appendix B: Count Data	31
Appendix C: Synchro Analysis.....	32



List of Exhibits

Exhibit 1. Site plan (source: City of Redlands)	3
Exhibit 2. Location map	4
Exhibit 3. Study intersections	5
Exhibit 4. Level of service criteria for signalized intersections	6
Exhibit 5. Existing peak hour traffic volumes (Intersections 1-4)	10
Exhibit 6. Existing peak hour traffic volumes (Intersections 5-8)	11
Exhibit 7. Existing peak hour traffic volumes (Intersections 9-11)	12
Exhibit 8. Existing conditions peak hours levels of service	13
Exhibit 9. Project trip generation	14
Exhibit 10. Trip distribution	15
Exhibit 11. Project-generated peak hour traffic volumes at driveways	16
Exhibit 12. Project-generated peak hour traffic volumes at intersections 1-4	17
Exhibit 13. Project-generated peak hour traffic volumes at intersections 5-8	18
Exhibit 14. Project-generated peak hour traffic volumes at intersections 9-11	19
Exhibit 15. Existing with project peak hours traffic volumes at driveways	21
Exhibit 16. Existing with project peak hour traffic volumes at intersections 1-4	22
Exhibit 17. Existing with project peak hour traffic volumes at intersections 5-8	23
Exhibit 18. Existing with project peak hour traffic volumes at intersections 9-11	23
Exhibit 19. Existing with project conditions peak hour levels of service and project impact	25
Exhibit 20. Impact of proposed mitigation measures	27



1. Introduction

GTS has prepared the following traffic impact study for the Redlands Marketplace project in Redlands, CA. The purpose of this study is to assess the potential impacts of the Redlands Marketplace project on traffic operations per the City's Guidelines (Measure U). A Vehicle Miles Traveled (VMT) analysis for the purposes of the CEQA document is provided under a separate cover.

a) Description of the proposed project

The project (Redlands Marketplace) proposes to construct a new shopping center with a 36,000 SF grocery store, four multi-tenant pad buildings (total area of 31,500 SF), and one drive-through restaurant (2,700 SF) on an approximately 14.5-acre site.

The project site is located at the northeast corner of West Lugonia Avenue and Tennessee Street (APN: 0167-171-16-0000) within the Special Development (EV/SD) District of the East Valley Corridor Specific Plan.

The project site plan is attached as Exhibit 1. The location within the City of Redlands is shown in Exhibit 2.

b) Scope of analysis

The scope of this study is based on the City of Redlands traffic study requirements, including Measure U, the City of Redlands CEQA Assessment VMT Analysis Guidelines, and in accordance with the San Bernardino County Association of Governments (SANBAG) Congestion Management Program (CMP) requirements. The scoping memorandum is presented in Appendix A.

The following two traffic assessments are evaluated for the proposed project:

1. *A Level of Service (LOS) analysis for compliance with the City's Measure U requirements*
2. *A Vehicle Miles Traveled (VMT) analysis for compliance with the requirements of the California Environmental Quality Act (CEQA) presented under a separate cover*

Study area

The following is a list of the study intersections which are shown in Exhibit 3.

1. *W Lugonia Ave & Tennessee St*
2. *W Lugonia Ave & Home Depot (HD) Parking Lot*
3. *W Lugonia Ave & New York St*
4. *W Lugonia Ave & Texas St*
5. *E Lugonia Ave (SR 38) & Orange St (State facility)*
6. *San Bernardino Ave & Texas St*
7. *San Bernardino Ave & Tennessee St (State facility)*
8. *San Bernardino Ave & Citrus Plaza Dr (State facility)*
9. *W Lugonia Ave & Citrus Plaza Dr*
10. *I-10 WB Ramps & Tennessee St (State facility)*
11. *I-10 EB Ramps & Tennessee St (State facility)*



The project driveways are also included in the analysis and labeled as:

- D1. W Lugonia Ave & Project Driveway 1 (Easternmost) – unsignalized
- D2. W Lugonia Ave & Project Driveway 2 – signalized
- D3. Tennessee St & Project Driveway 3 - unsignalized
- D4. Tennessee St & Project Driveway 4 (Northernmost) - unsignalized

The intersection analysis for the traffic study is accomplished using Synchro software program. Level of Service (LOS) standards for the traffic study are in accordance with Measure U in the City of Redlands.

Analysis scenarios

Per the requirements of Measure U, this study includes an evaluation of the following analysis scenarios for weekday AM and PM peak hours conditions:

- *Existing Conditions*
- *Existing Conditions Plus Project*



Exhibit 1. Site plan (source: City of Redlands)

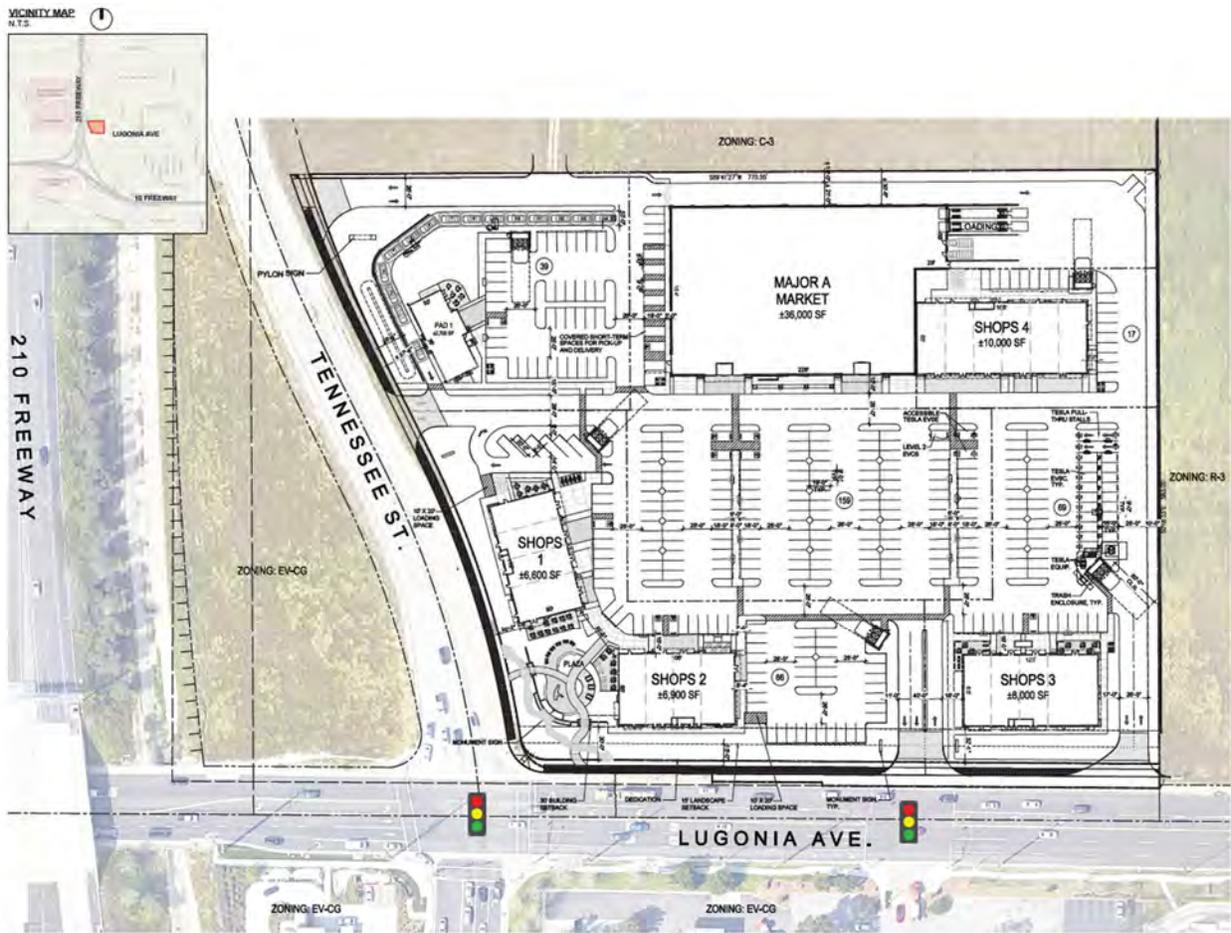


Exhibit 2. Location map

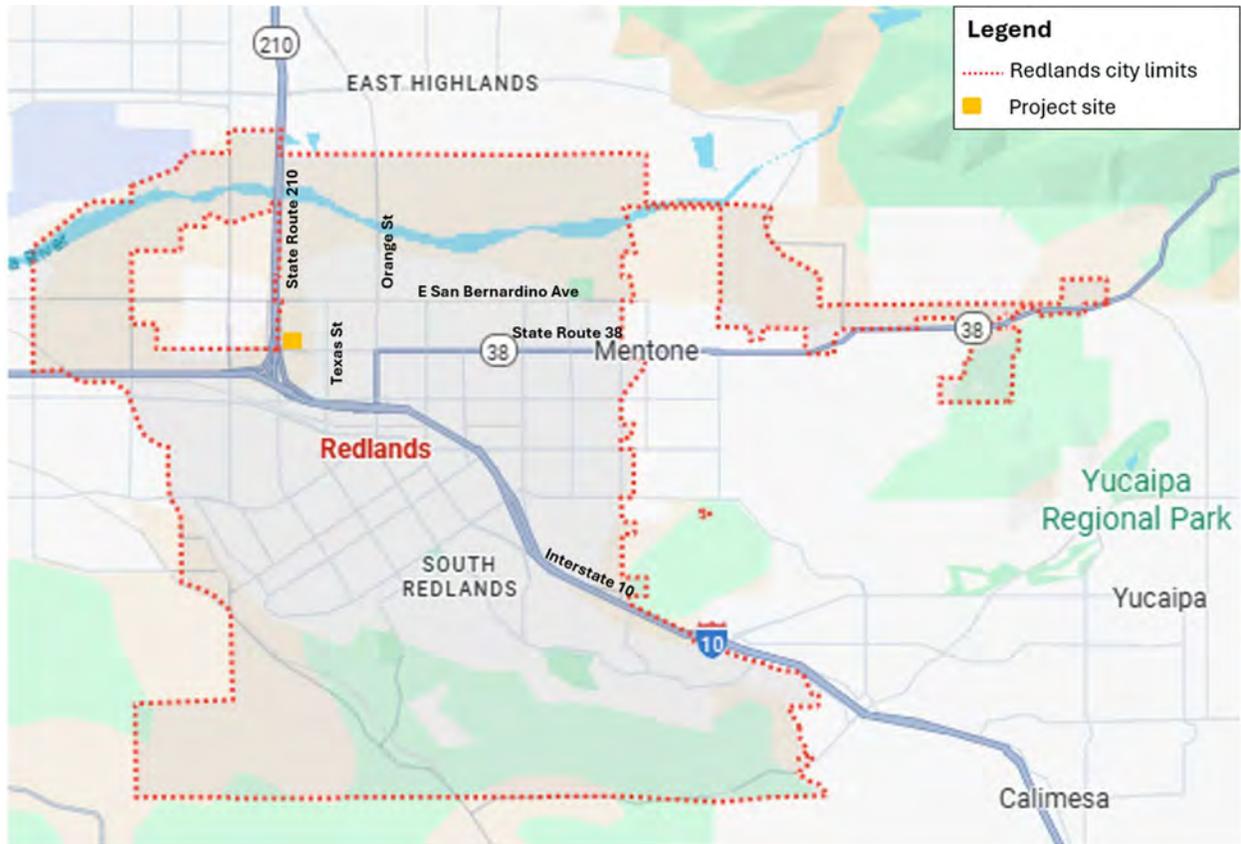
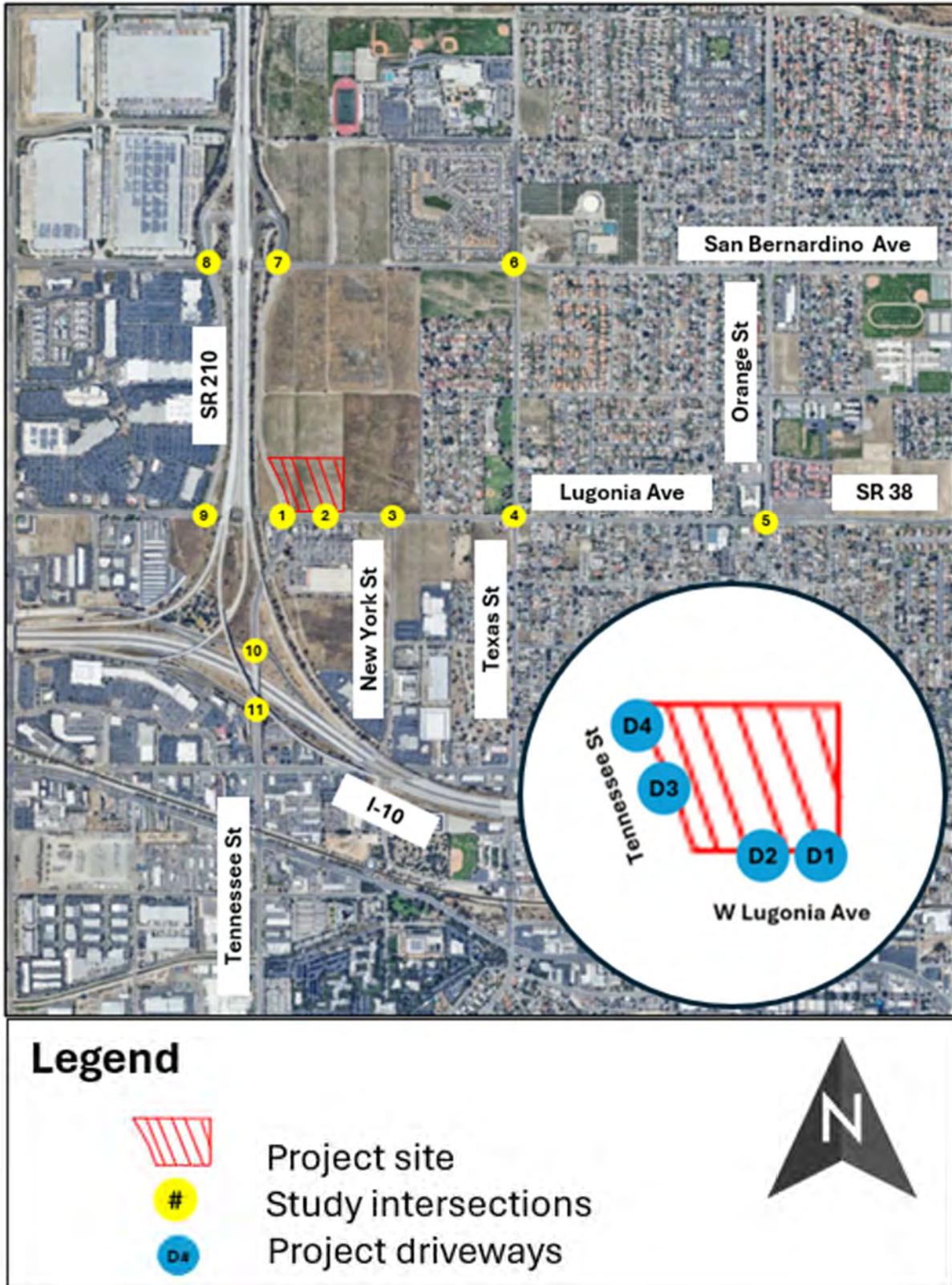


Exhibit 3. Study intersections



2. Methodology

This traffic impact analysis is based on the City of Redlands traffic study requirements, including Measure U, the City of Redlands CEQA Assessment VMT Analysis Guidelines, and in accordance with the San Bernardino County Association of Governments (SANBAG) Congestion Management Program (CMP) requirements. For state facilities the project also references Caltrans Guide for the Preparation of Traffic Impact Studies (December 2002). It should be noted that Caltrans uses VMT for CEQA review per the Caltrans Traffic Impact Study Guide (2020) and considers level of service (LOS) only for operational and design coordination (not as a CEQA threshold). As noted earlier, VMT analysis is presented under a separate cover.

Level of Service/Operational Analysis Methodology

While VMT is the preferred quantitative metric for assessing potentially significant transportation impacts under CEQA, it should be noted that SB 743 does not prevent a city or county from using metrics such as level of service (LOS) as part of the application of local general plan policies, municipal and zoning codes, conditions of approval, or any other planning requirements through a city's planning approval process; cities can still ensure adequate operation of the transportation system in terms of transportation congestion measures related to vehicular delay and roadway capacity.

The study intersections (all signalized) are analyzed using the Highway Capacity Manual (HCM) methodology. This method measures the delay in seconds per vehicle at an intersection and assigns a numerical value called delay-per-vehicle (measured in seconds/vehicle) and a corresponding letter value to the intersection.

The degree of congestion at an intersection is described by the level of service, which ranges from LOS A to LOS F, with LOS A representing free-flow conditions with little delay and LOS F representing over-saturated traffic flow throughout the peak hour. The level of service criteria for signalized intersections are shown in Exhibit 4 below.

Exhibit 4. Level of service criteria for signalized intersections

Level of Service	Average Control Delay (seconds/vehicle)	General Description
A	≤10	Free Flow
B	>10 – 20	Stable Flow (slight delays)
C	>20 – 35	Stable flow (acceptable delays)
D	>35 – 55	Approaching unstable flow (tolerable delay, occasionally wait through more than one signal cycle before proceeding)
E	>55 – 80	Unstable flow (intolerable delay)
F ¹	>80	Forced flow (congested and queues fail to clear)

Source: *Highway Capacity Manual 7th Edition*, Transportation Research Board, 2022.

1. If the volume-to-capacity (v/c) ratio for a lane group exceeds 1.0 LOS F is assigned to the individual lane group. LOS for overall approach or intersection is determined solely by the control delay.



Transportation effects

The City of Redlands General Plan and Measure U Section 1A.60 Principle Six has established the minimum acceptable Level of Service (C or better) for roadway segment and peak hour intersection operations. Where the current Level of Service is lower than C, roadway improvements shall be provided such that the LOS is not reduced below the LOS at the time of the application, or as provided in Section 5.20 of the Redlands General Plan where a more intense Level of Service is specifically permitted, for Existing Plus Project conditions.

For study intersections within the City of Redlands, a project's traffic impact requires mitigation if the addition of project-generated trips is forecast to cause a degradation to Level of Service D, E, or F at a study intersection. For project impacts at facilities with existing acceptable Level of Service (C or better), the project shall provide improvements that would, at a minimum, provide Level of Service C or better. For project impacts at facilities with existing unacceptable Level of Service (D, E, or F), the project shall provide improvements that would, at a minimum, provide Level of Service that is equal to or better than existing conditions.



3. Existing Conditions

This section describes the existing transportation settings in the project study area.

a) Existing roadway system

Regional access to the project site is provided by Interstate 10 and State Route 210. Local circulation is provided by Lugonia Avenue, Citrus Plaza Drive, Tennessee Street, New York Street, Texas Street, Orange Street, and San Bernardino Avenue.

Interstate 10 (I-10) is a major east-west freeway corridor that runs through the City of Redlands. In the project vicinity, I-10 is an eight-lane freeway (four lanes in each direction), with additional auxiliary and merge lanes near interchanges. The nearest interchange to the study area is the I-10/Tennessee Street interchange, which offers full access (on- and off-ramps) in both directions and serves as a key access point for local and regional traffic.

State Route 210 (SR 210), also known as the Foothill Freeway, is a limited-access freeway that runs to the west of the project site. In the vicinity of the project, SR 210 terminates at its system interchange with I-10.

Lugonia Avenue is an east–west principal arterial that runs through northern Redlands and is designated as State Route 38 east of Orange Street. In the vicinity of the project, Lugonia Avenue is a multi-lane facility with dedicated turn lanes and signalized intersections. It carries moderate to heavy traffic volumes and provides direct access to commercial centers such as Citrus Plaza and Mountain Grove.

Citrus Plaza Drive is a local collector road that provides access to the Citrus Plaza and Mountain Grove shopping centers from San Bernardino Avenue and Lugonia Avenue. It intersects with San Bernardino Avenue at a signalized intersection and serves high volumes of retail-generated traffic. The roadway is two to three lanes wide, depending on the segment, and is designed to accommodate substantial turning movements into and out of adjacent commercial properties.

Tennessee Street is a local north–south collector that connects I-10 to the north Redlands area, including Lugonia Avenue and San Bernardino Avenue. It features two to three lanes in each direction, depending on the segment, with signalized intersections at key cross streets. Tennessee Street is a key route for both commuter and commercial traffic and serves as a connector to residential neighborhoods and shopping destinations.

New York Street is a major collector south of Lugonia Avenue, providing local access to adjacent businesses and service centers. In the vicinity of the project, New York Street is one lane in each direction.

Texas Street is a north–south minor arterial located east of the project site. It intersects with Lugonia Avenue and extends north toward residential neighborhoods, providing a connection to San Bernardino Avenue. To the south, Texas Street continues toward I-10, where it passes beneath the freeway as part of a grade-separated interchange.

Orange Street is a north–south principal arterial located further west of Texas Street. It connects north with San Bernardino Avenue and south with I-10. In the vicinity of the project, Orange Street



is two to three lanes wide in each direction. Between I-10 and Lugonia Ave, Orange Street is SR 38.

San Bernardino Avenue is an east–west minor arterial located north of the project site. It runs parallel to Lugonia Avenue and connects to SR 210 at the intersections with Tennessee Street and Citrus Plaza Drive through on- and off-ramps. In the vicinity of the project, San Bernardino Ave is two to four lanes wide in each direction and includes signalized intersections at Tennessee Street and Citrus Plaza Drive.

b) Public transit and active transportation

Public transit. OmniTrans Route 15 serves Redlands in the vicinity of the project with bus stops on Lugonia Avenue and San Bernardino Avenue. Metrolink’s San Bernardino Line runs approximately 0.7 miles south of the project site. The closest rail station to the site is the Redlands-ESRI station, 1.1 miles away.

Bicycle network. According to the Redlands Sustainable Mobility Plan (2021), the area in the vicinity of the project site features existing designated class II bike lane on W San Bernardino Avenue to the east of Texas St, a planned designated class II bike lane on W San Bernardino Avenue to the west of Texas St, an existing designated class III bike route on W Pennsylvania Ave, and a planned designated class III bike route on Texas Street. However, the project area currently lacks bicycle parking.

Pedestrian facilities. In the vicinity of the project site, W Lugonia Avenue features sidewalks 5-ft wide on the south side of the roadway. Sidewalks along the north side of the roadway are intermittent and overgrown and/or blocked by utility poles in some places. There are larger concrete pads, ADA ramps, and crosswalks at the intersection of W Lugonia Avenue and Tennessee Street. No pedestrian crossing signs or crosswalks are provided at the intersections of W Lugonia Avenue and Home Depot parking lot and W Lugonia Avenue and New York Street. There is currently no pedestrian infrastructure on Tennessee Street.

c) Existing traffic volumes

Existing weekday AM and PM peak hour turning movement volumes were collected on Wednesday May 28, 2025, at the aforementioned intersections 1-11 shown in Exhibit 3. It should be noted that the day of the data collection was a typical clear day during which school was in session.

The existing volumes are shown in Exhibits 5-7. The raw traffic count data including passenger car equivalent (PCE) adjustments are provided in Appendix B.



Exhibit 5. Existing peak hour traffic volumes (Intersections 1-4)

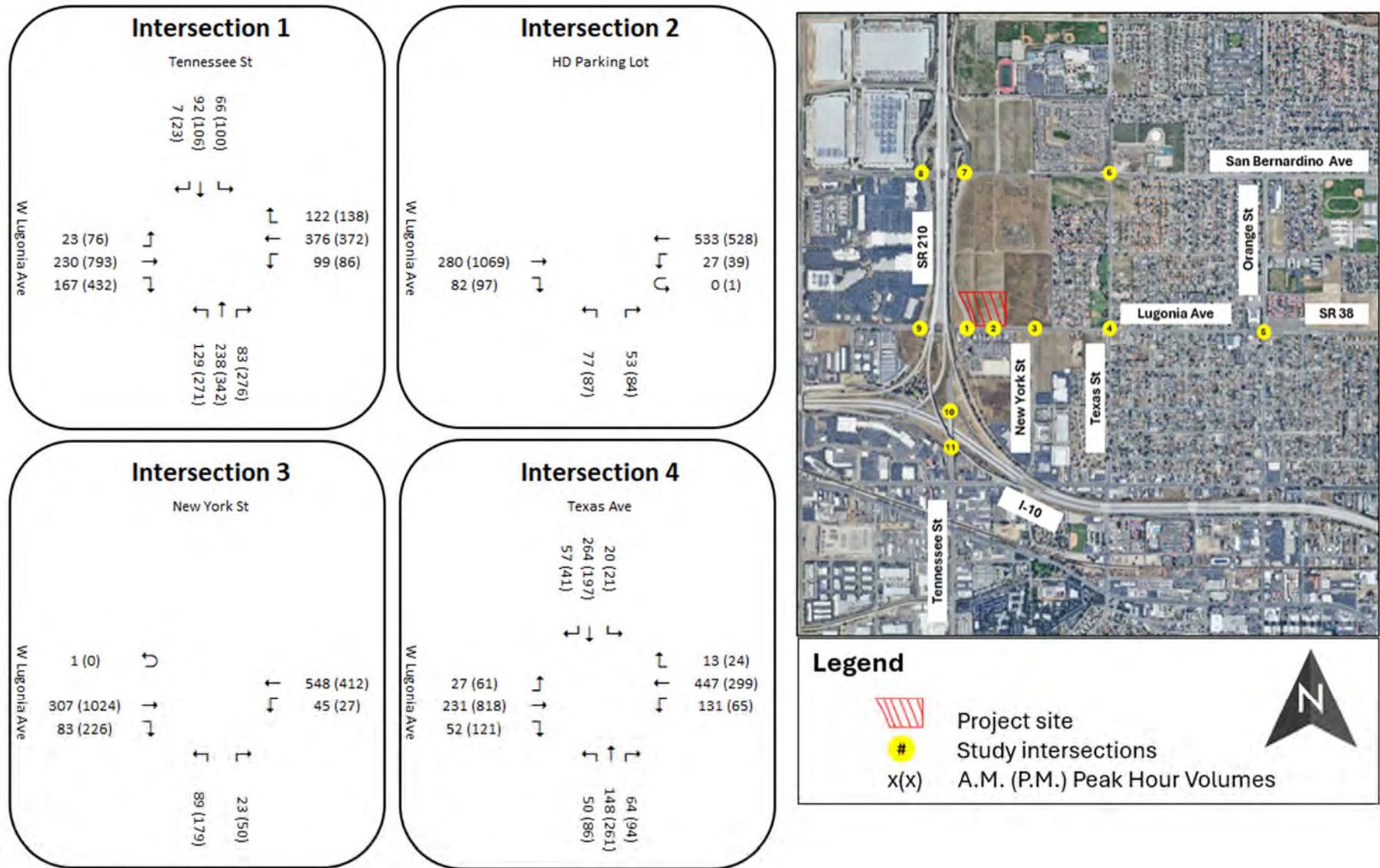


Exhibit 6. Existing peak hour traffic volumes (Intersections 5-8)

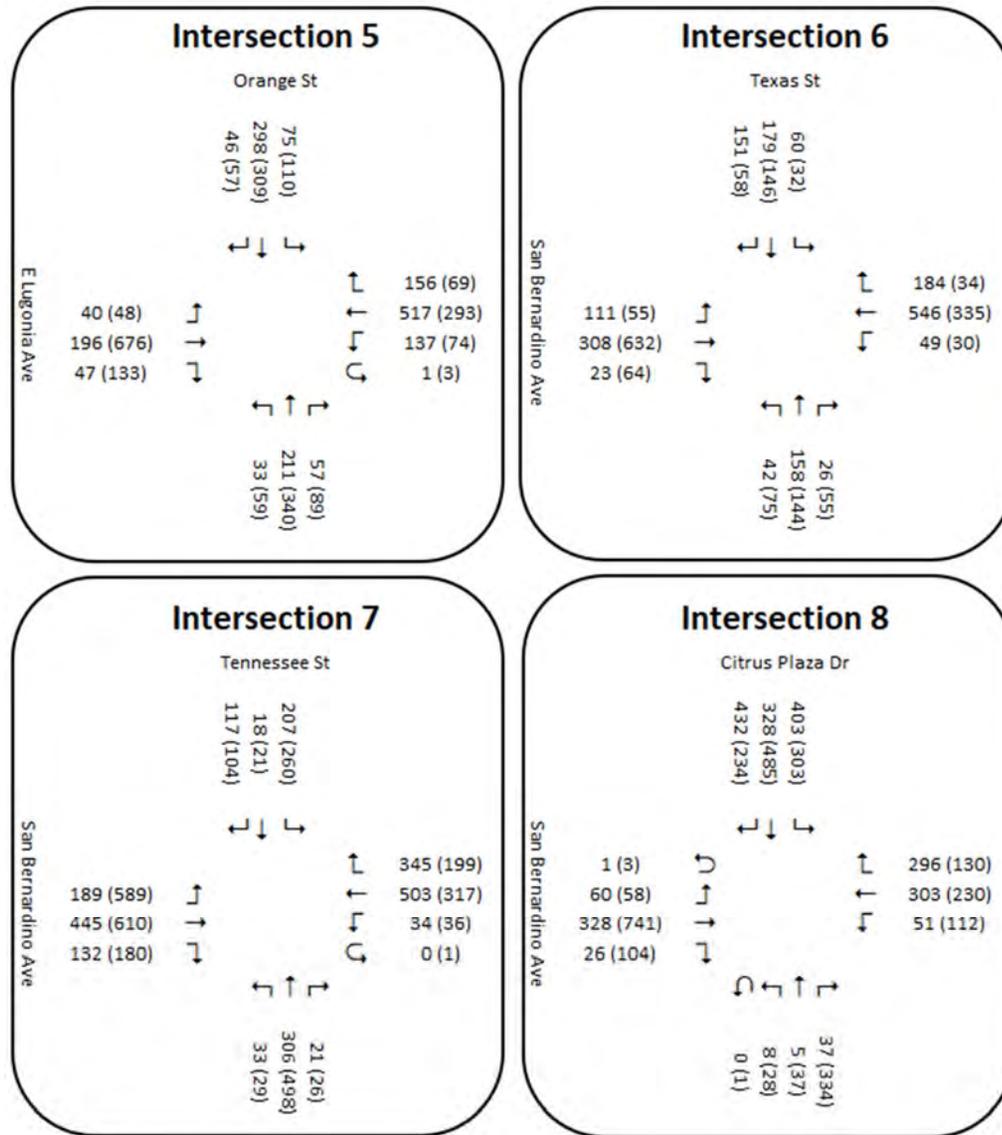
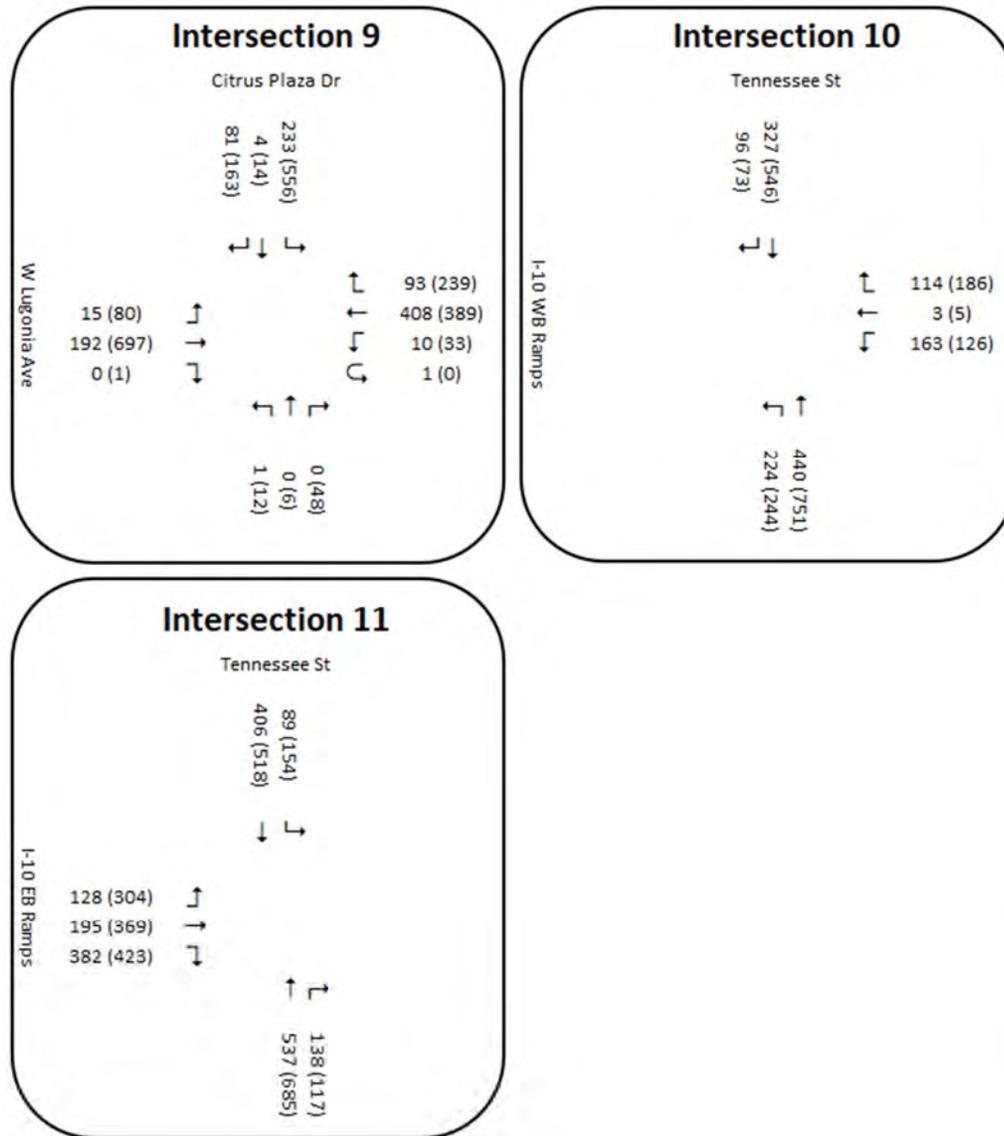


Exhibit 7. Existing peak hour traffic volumes (Intersections 9-11)



d) Existing intersection level of service

The study intersection levels of service for existing conditions are shown in Exhibit 8. Detailed level of service worksheets are provided in Appendix C.

As shown in Exhibit 8, the study intersections currently operate within acceptable levels of service (C or better), except for the following intersections:

1. W Lugonia Ave & Tennessee St operating with LOS E during PM peak hour
5. E Lugonia Ave & Orange St: LOS D during AM peak hour
6. San Bernardino Ave & Texas St: LOS D during PM peak hour
7. San Bernardino Ave & Tennessee St: LOS E during AM peak hour and LOS F during PM peak hour
8. San Bernardino Ave & Citrus Plaza Dr: LOS F during both AM and PM peak hours
11. I-10 EB Ramps & Tennessee St: LOS E during PM peak hour

Exhibit 8. Existing conditions peak hours levels of service

Intersection	Control Type	AM Peak		PM Peak	
		Delay	LOS	Delay	LOS
1. W Lugonia Ave & Tennessee St	Signalized	25.7	C	69.7	E
2. W Lugonia Ave & HD Parking Lot	Signalized	16.5	B	19.6	B
3. W Lugonia Ave & New York St	Signalized	9.0	A	22.8	C
4. W Lugonia Ave & Texas St	Signalized	15.5	B	19.3	B
5. E Lugonia Ave & Orange St	Signalized	35.9	D	27.6	C
6. San Bernardino Ave & Texas St	Signalized	28.5	C	45.6	D
7. San Bernardino Ave & Tennessee St	Signalized	59.9	E	184.6	F
8. San Bernardino Ave & Citrus Plaza Dr	Signalized	192.0	F	82.5	F
9. W Lagonia Ave & Citrus Plaza Dr	Signalized	8.4	A	10.6	B
10. I-10 WB Ramps & Tennessee St	Signalized	28.2	C	30.1	C
11. I-10 EB Ramps & Tennessee St	Signalized	22.4	C	60.2	E

Delay is reported in seconds per vehicle

LOS = Level of Service

Unacceptable LOS according to Measure U of the City of Redlands are highlighted in gray



4. Project Trip Forecasts

This section describes how project trip generation, trip distribution, and trip assignment volumes were developed.

a) Project trip generation

Trip generation calculations use the trip generation rates of the Institute of Transportation Engineers (ITE) Trip Generation Manual (TGM), 11th Edition (2021) for Coffee/Donut Shop with Drive-Through Window (Land Use Code 937) and Shopping Plaza (40k-150k square feet) (Land Use Code 821).

While no pass-by rates for Land Use Code 937 were reported in the TGM, the rates for LUC 934 (Fast Food Restaurant) were used as a proxy, i.e., 50% in the AM peak hour and 55% in the PM peak hour with the daily pass-by rate assumed as 50% (the lower of the two). The pass-by rates for LUC 810 are 40% for the PM peak, with the conservative 5% rate assumed for the daily and AM peak periods.

Exhibit 9 summarizes the estimated trip generation for the project site on a typical weekday during the AM peak and PM peak hours for the peak hour. As shown, the project is expected to generate 4,547 daily trips, 259 AM peak hour trips, and 413 PM peak hour trips.

Exhibit 9. Project trip generation

Land Use	Land Use Code	Units	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Trip Rates¹									
Coffee/Donut Shop with Drive-Through Window	937	TSF	533.57	43.80	42.08	85.88	19.50	19.50	38.99
Shopping Plaza (40 to 150k)	821	TSF	94.49	2.19	1.34	3.53	4.33	4.70	9.03
Trip Generation									
Coffee/Donut Shop with Drive-Through Window		2,700	1,441	118	114	232	53	53	105
Shopping Plaza (40 to 150k)		67,500	6,378	148	91	238	293	317	610
Pass-By Trips									
Coffee/Donut Shop with Drive-Through Window ²			720	59	57	116	29	29	58
Shopping Plaza (40 to 150k) ³			319	7	5	12	117	127	244
Net New Trips			6,779	199	143	342	199	214	413

¹ Trip rates from the Institute of Transportation Engineers, Trip Generation Manual (TGM), 11th Edition, 2021 per the identified Land Use Category (LUC).

² No Pass-By rates for LUC 937; Pass-By rates for LUC 934 were used conservatively rather than LUC 938; 50% in AM Peak and 55% in PM Peak. Daily is assumed 50% (lower of both).

³ Average pass-by rate for LUC 821 Weekday PM Peak Period (40%); a conservative (5%) rate is assumed for Daily and AM Peak Period.



Exhibit 11. Project-generated peak hour traffic volumes at driveways

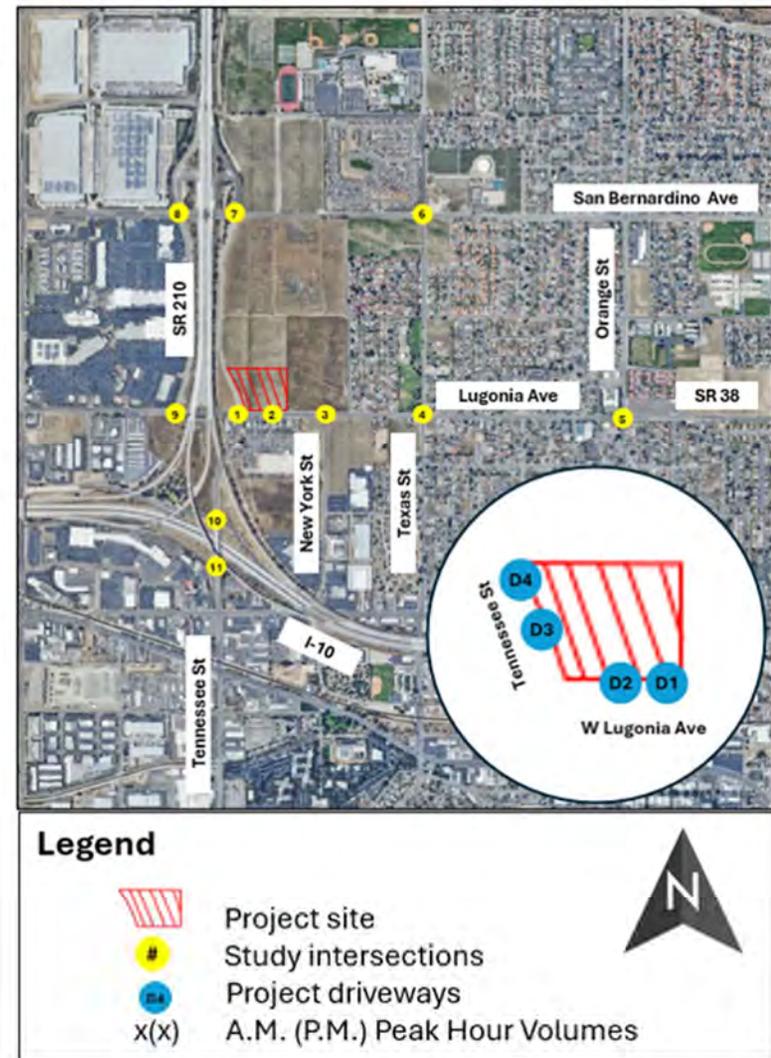
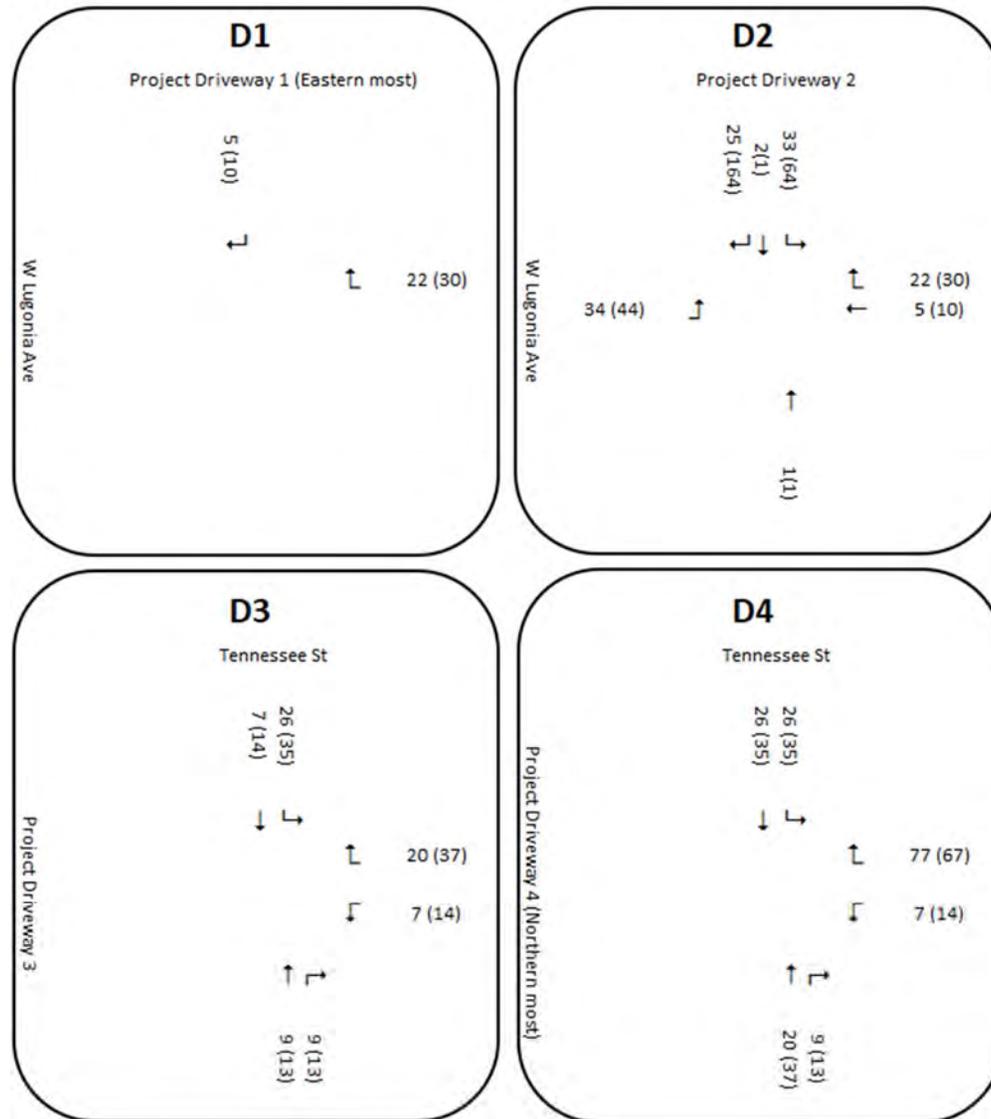


Exhibit 12. Project-generated peak hour traffic volumes at intersections 1-4
 (Note: Intersection 2 is D2)

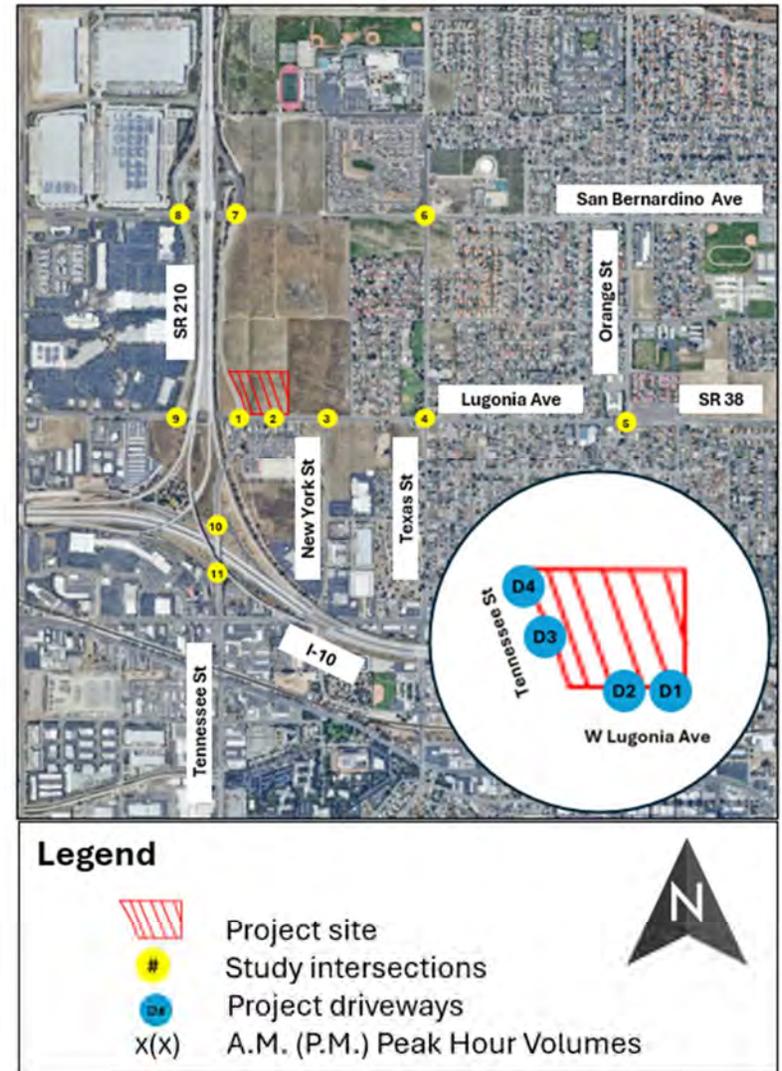
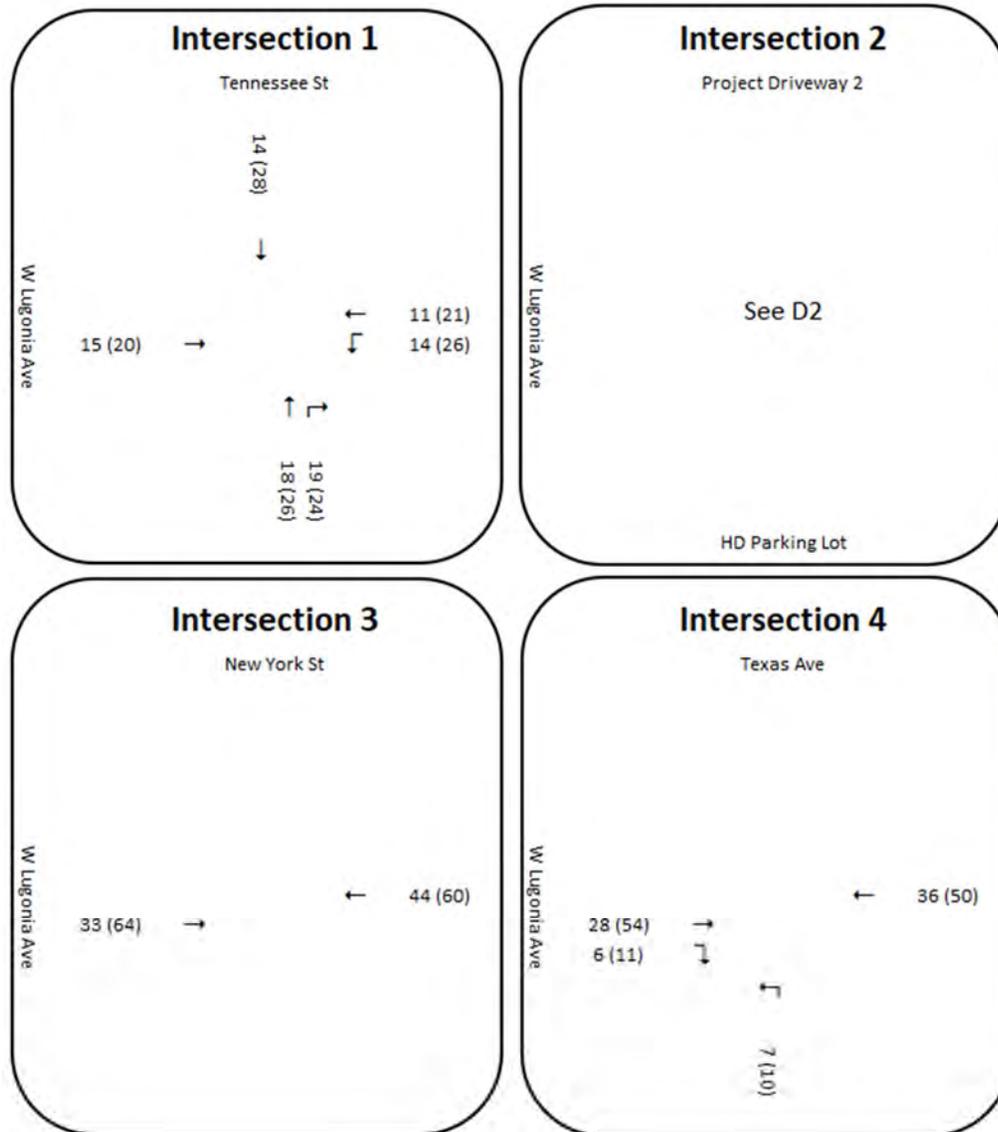


Exhibit 13. Project-generated peak hour traffic volumes at intersections 5-8

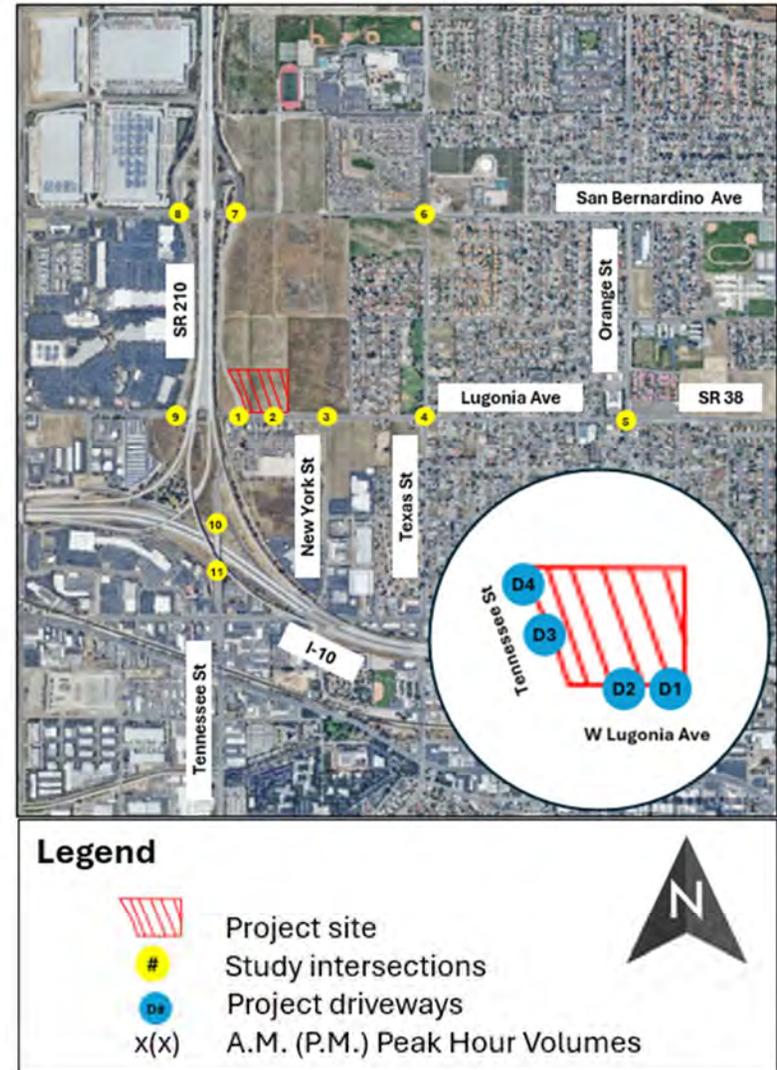
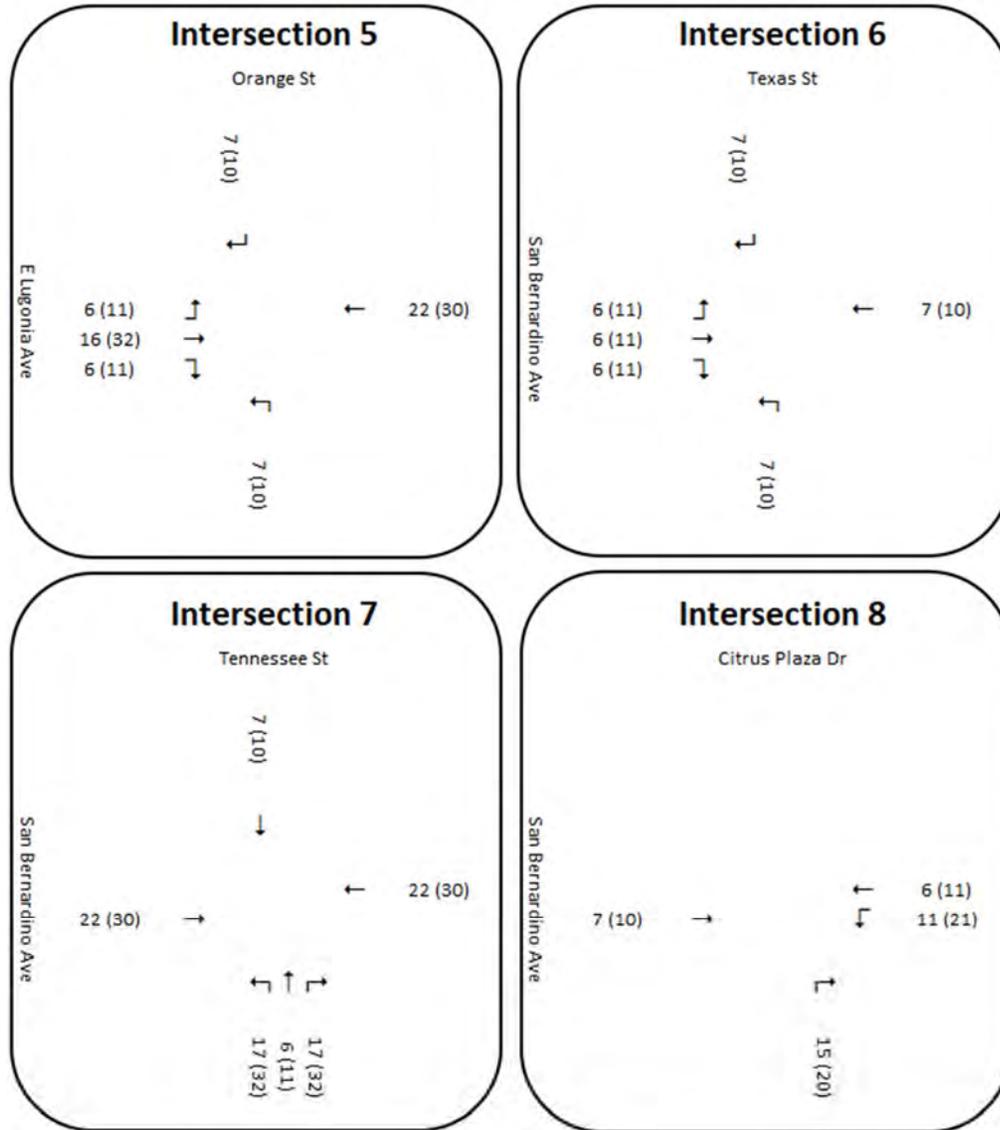
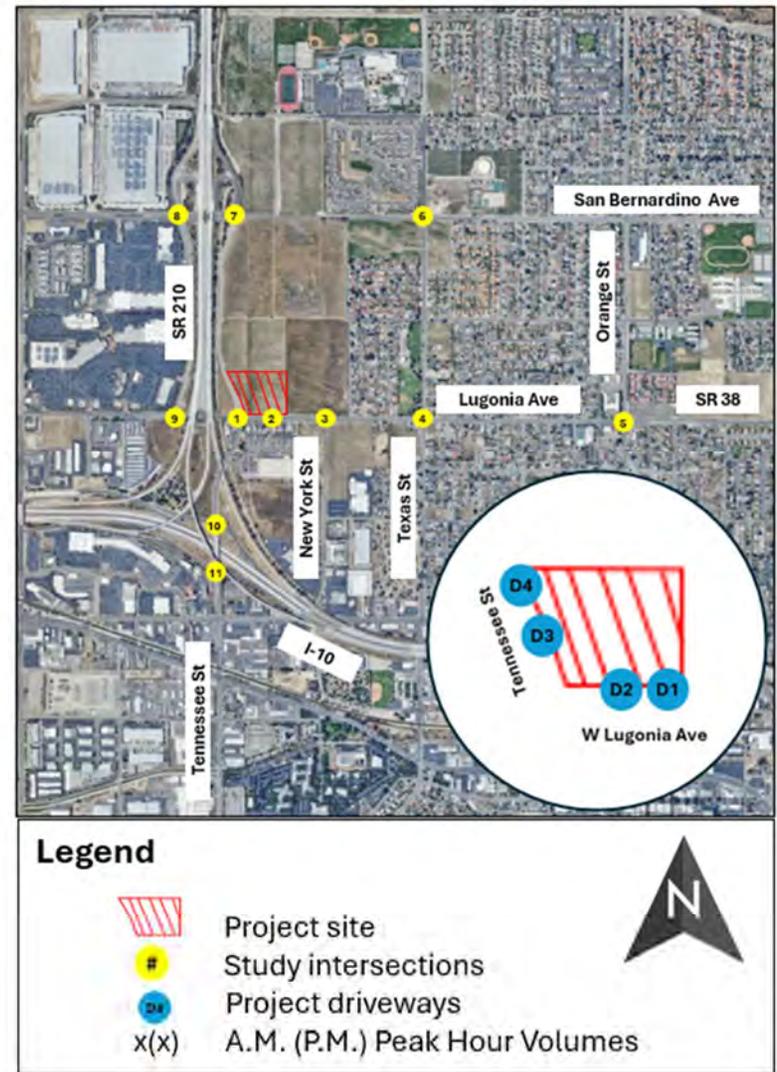
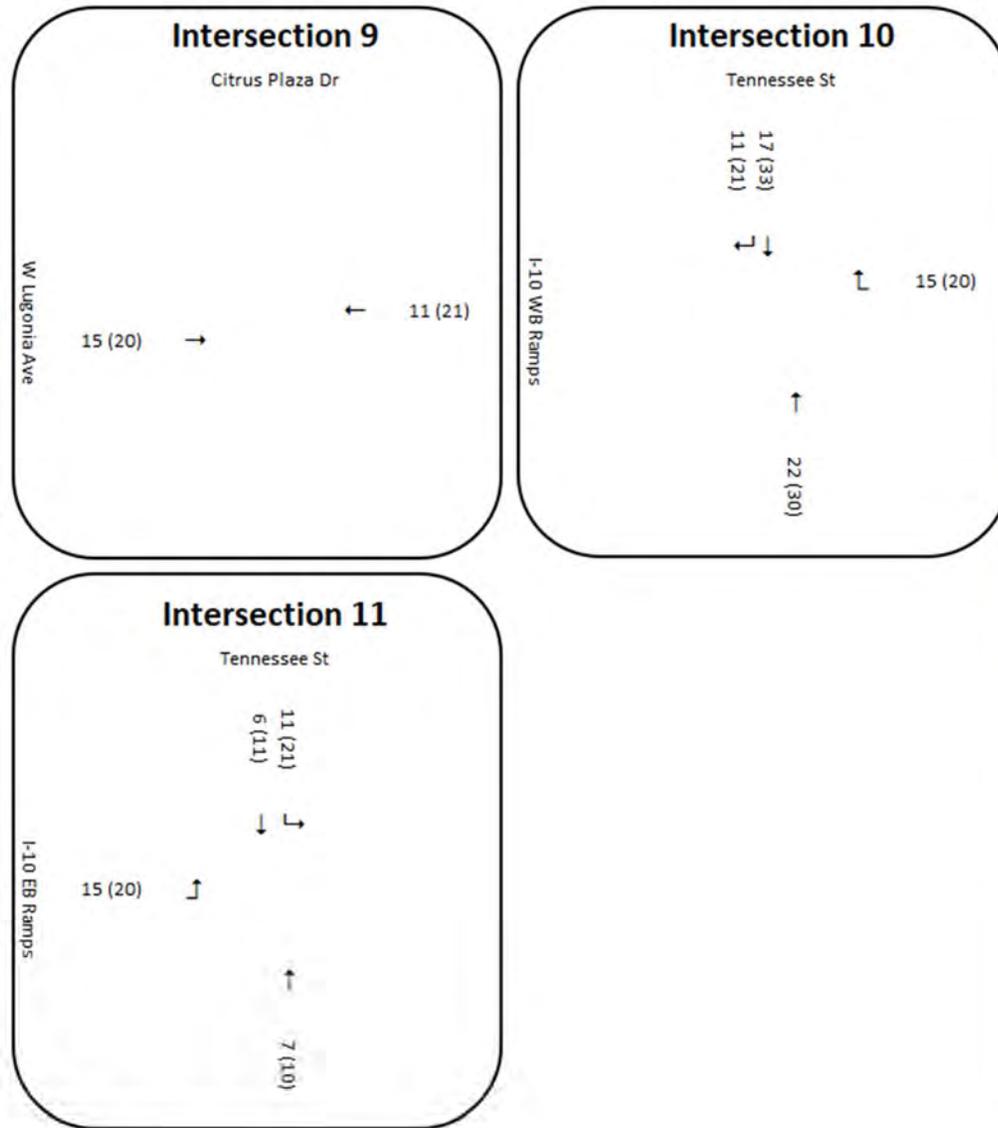


Exhibit 14. Project-generated peak hour traffic volumes at intersections 9-11



5. Existing Plus Project Conditions

This section presents the volume forecasts and the level of service at the study intersections under the Existing Plus Project conditions.

a) Existing plus project volume forecasts

The Existing Plus Project volume forecast was developed by adding project-generated trips to the Existing volumes. Existing Plus Project AM and PM peak hours intersection turning movement volumes are shown in Exhibits 15-18.

b) Existing plus project intersection level of service

Detailed intersection level of service calculation worksheets are provided in Appendix C.

The study intersection Levels of Service for Existing Plus Project conditions are shown in Exhibit 19 and queue lengths are reported in Appendix C.

The project is forecasted to degrade the level of service from the current LOS grade (under existing conditions) to a lower grade at the following intersections:

2. W Lugonia Ave & HD Parking Lot (LOS degraded from C to F at the PM peak hour)
4. W Lugonia Ave & Texas St (LOS degraded from B to E at the PM peak hour)

No instances of queues changing by more than one vehicle were observed at Caltrans facilities.



Exhibit 15. Existing with project peak hours traffic volumes at driveways

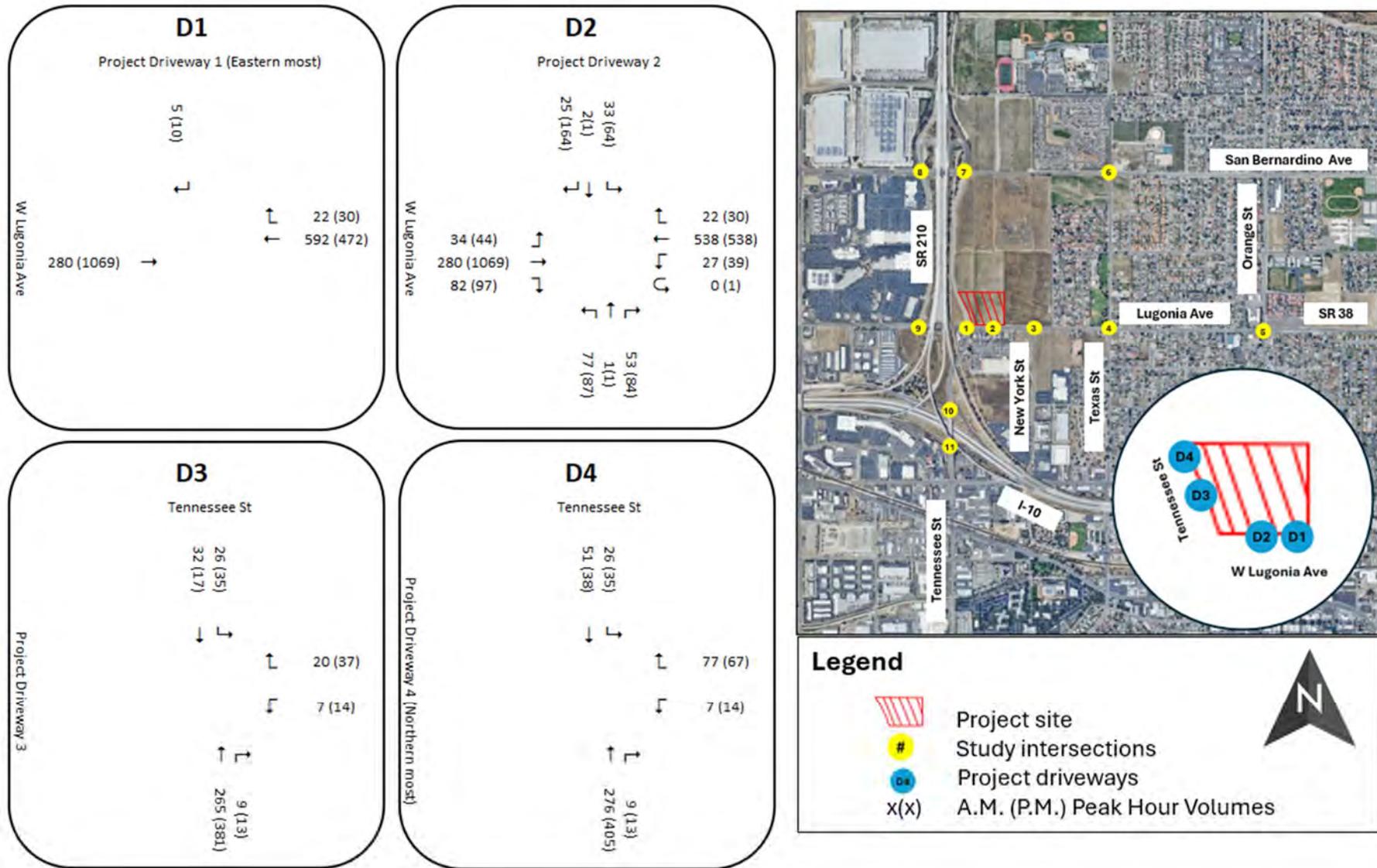


Exhibit 16. Existing with project peak hour traffic volumes at intersections 1-4
 (Note: Intersection 2 is D2)

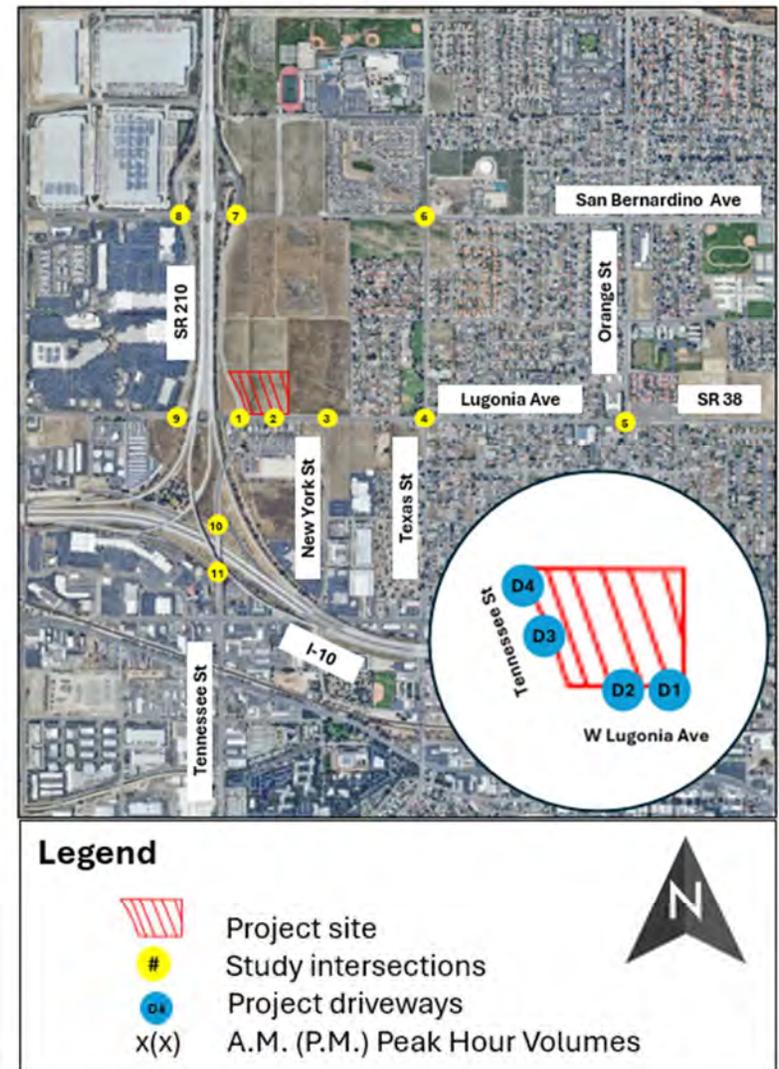
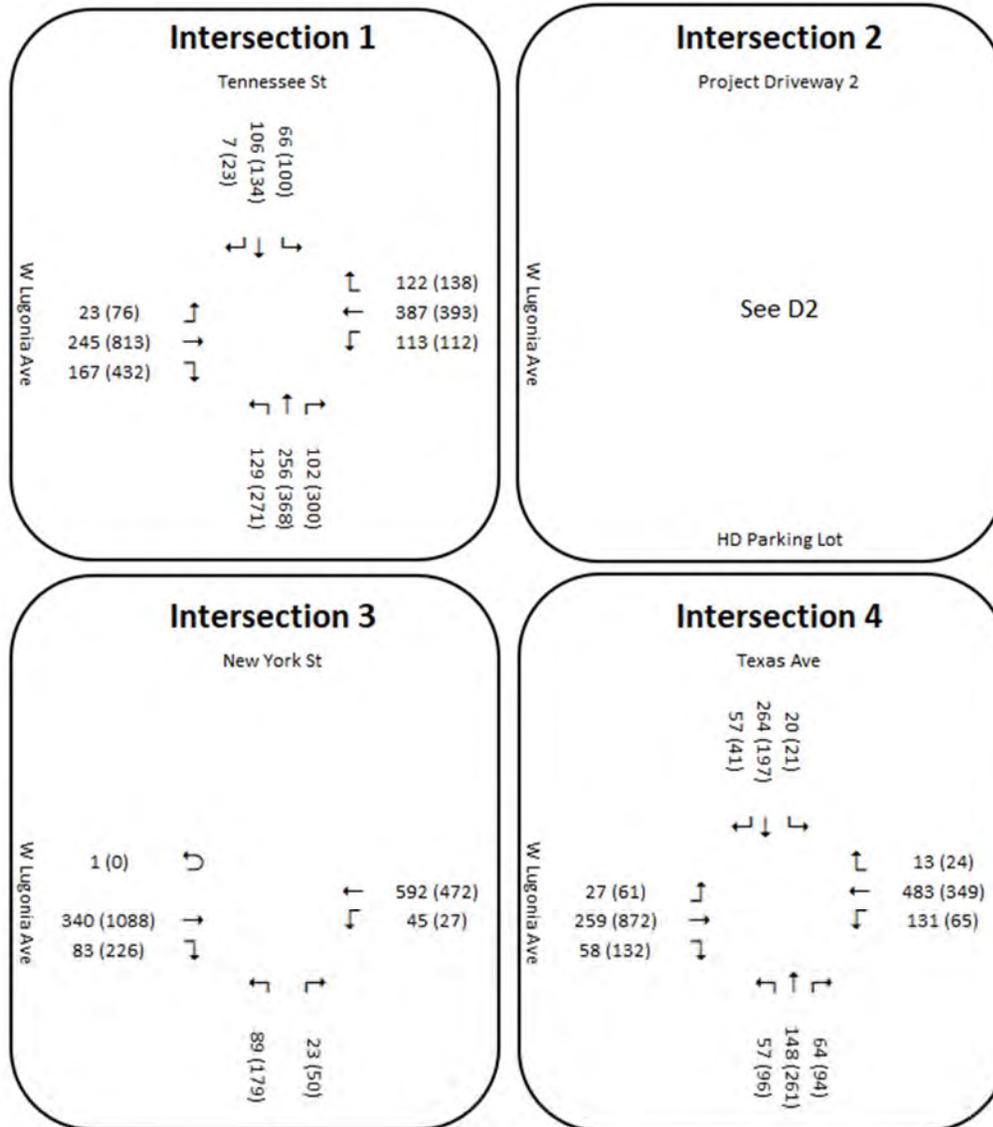


Exhibit 17. Existing with project peak hour traffic volumes at intersections 5-8

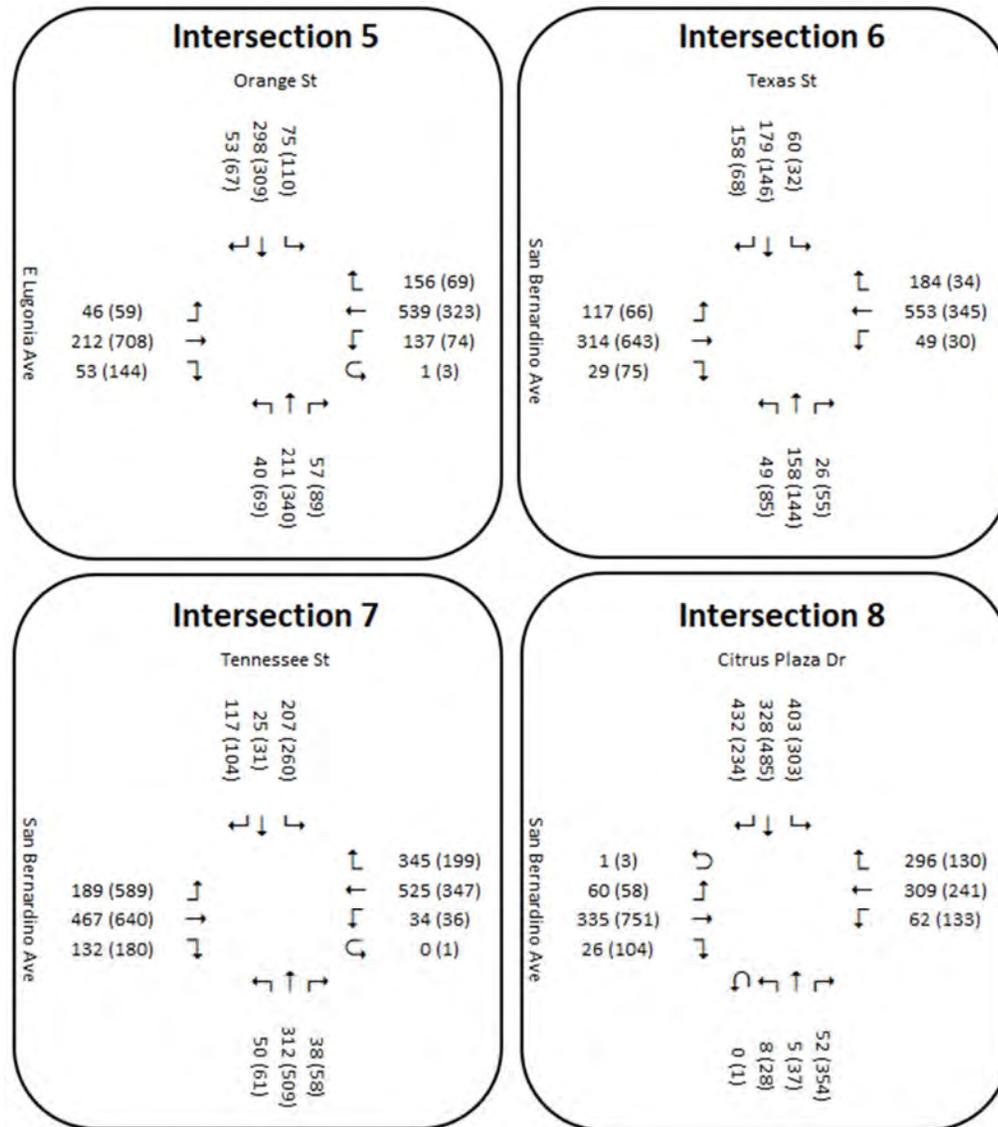


Exhibit 18. Existing with project peak hour traffic volumes at intersections 9-11



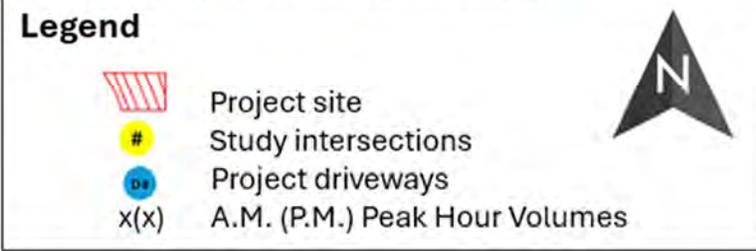
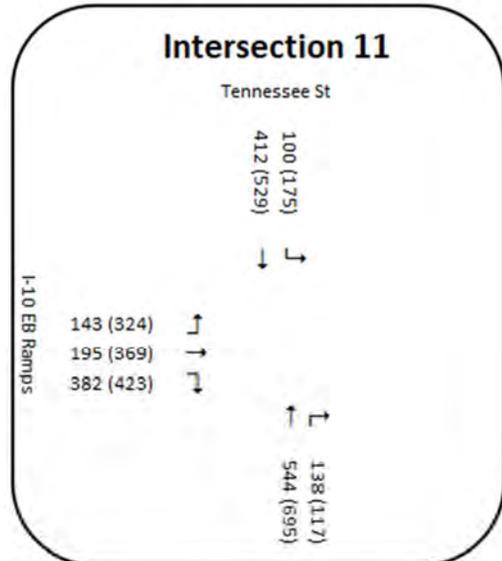
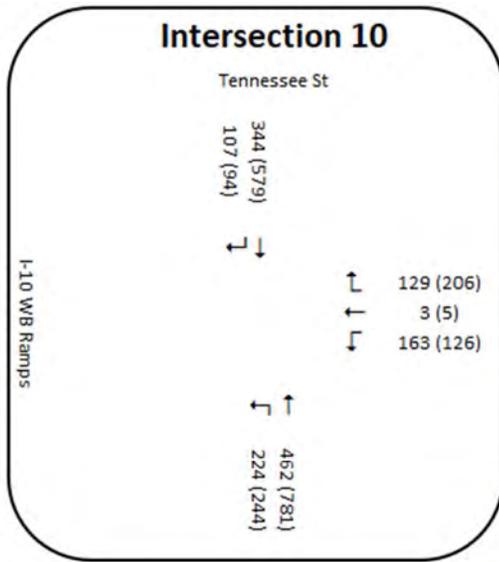
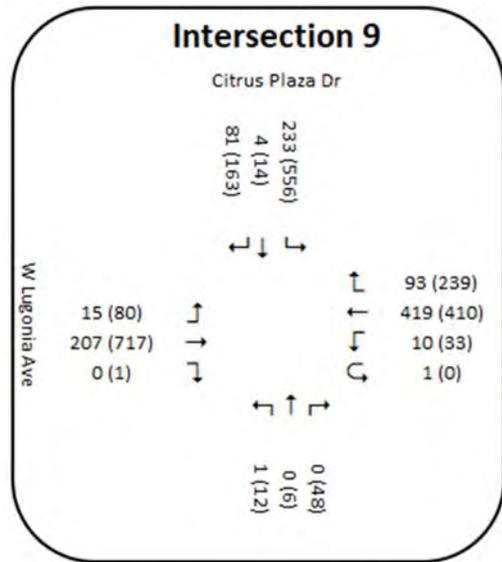


Exhibit 19. Existing with project conditions peak hour levels of service and project impact

Intersection	Control Type	Existing Conditions				Existing + Project Conditions				Project Impact	
		AM Peak		PM Peak		AM Peak		PM Peak		Increase in Delay	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	AM	PM
1. W Lugonia & Tennessee	Signalized	25.7	C	69.7	E	26.2	C	71.3	E	0.5	1.6
2. W Lugonia & HD Parking Lot (D2)	Signalized	16.5	B	19.6	B	22.8	C	92.2	F	6.3	*72.6
3. W Lugonia & New York	Signalized	9.0	A	22.8	C	9.0	A	22.4	C	0.0	-0.4
4. W Lugonia & Texas	Signalized	15.5	B	19.3	B	15.7	B	65.2	E	0.2	*45.9
5. E Lugonia & Orange	Signalized	35.9	D	27.6	C	39.5	D	29.3	C	3.6	1.7
6. San Bernardino & Texas	Signalized	28.5	C	45.6	D	30.0	C	51.6	D	1.5	6.0
7. San Bernardino & Tennessee	Signalized	59.9	E	184.6	F	62.2	E	182.9	F	2.3	-1.7
8. San Bernardino & Citrus Plaza	Signalized	192.0	F	82.5	F	189.4	F	83.5	F	-2.6	1.0
9. W Lagonia & Citrus Plaza	Signalized	8.4	A	10.6	B	8.4	A	10.7	B	0.0	0.1
10. I-10 WB Ramps & Tennessee	Signalized	28.2	C	30.1	C	27.7	C	30.6	C	-0.5	0.5
11. I-10 EB Ramps & Tennessee	Signalized	22.4	C	60.2	E	23.7	C	66.8	E	1.3	6.6
D1. W Lugonia & Dwy 1	Unsignalized	--	--	--	--	0.1	A	0.1	A	--	--
D3. Dwy 3 & Tennessee	Unsignalized	--	--	--	--	8.6	A	19.9	C	--	--
D4. Dwy 4 & Tennessee	Unsignalized	--	--	--	--	8.8	A	10.5	B	--	--

Delay is reported in seconds per vehicle

LOS = Level of Service

Unacceptable LOS according to Measure U of the City of Redlands are highlighted in gray

* indicates that project contributions degrade the level of service from the current LOS grade (under existing conditions) to a lower grade. The corresponding intersection is marked in Bold.

-- indicates future intersection.



6. Site Access

The site will be accessed by four driveways, which are shown in the diagrams and maps in Sections 4 and 5 and are described as follows:

Driveway 1, at the southeast corner of the site, will provide right-in/right-out access from/to Lugonia Avenue.

Driveway 2, on the south edge of the site, will provide access from/to eastbound and westbound Lugonia Avenue and direct access from/to Home Depot.

Driveway 3, on the west edge of the site, will provide access from/to northbound and southbound Tennessee Street.

Driveway 4, at the northwest corner of the site, will provide access from/to northbound and southbound Tennessee Street.

Pedestrian access to the site will be facilitated by a network of walkways and crosswalks as shown in the site plan.

As shown in Exhibit 19, the driveways operate at an acceptable LOS (A, B, C).

7. On-site Circulation

On-site circulation will be provided by interconnected driveways and pedestrian walkways and crosswalks as shown in the site plan. No issues with on-site circulation were identified in this analysis.

8. Queuing Analysis

Queuing analysis was carried out for the drive-through lane based on the methodology provided in The Los Angeles Department of Transportation (LADOT) Manual of Policies & Procedures (MPP) Section 321 Appendix B¹. This methodology aims to determine the queue length necessary to service traffic intensity based on random arrivals (Poisson distribution) and it is consistent with Transportation Research Board Report 165 Traffic Flow Theory, Chapter 8 Queuing Models². Traffic intensity is calculated as the ratio of peak hour arrival rate to typical service rate.

In this analysis, the following rates are assumed based on studies³ previously conducted for proposed coffee shops (Starbucks) in the City of Whittier in LA county:

- *Service utilization rate = 57% of AM peak hour inbound trips or 60% of PM peak hour inbound trips*
- *Average service rate = 90 vehicles per hour (vph)*

¹ [Traffic Study Policies and Procedures, LADOT \(June 2013\)](#)

² [Traffic Flow Theory, A Monograph \(Gerlough and Huber, 1975\)](#)

³ Prepared by LLG Engineers and Stantec Consulting Services Inc.



The peak hour arrival rate (average number of vehicles expected to utilize the proposed drive-through lane) is determined based on the service utilization rate applied to unadjusted peak hour inbound trip generation.

As shown in Exhibit 9 (project generated trips based on ITE trip generation rates), the proposed Coffee/Donut Shop with Drive-Through Window is expected to generate 118 AM and 53 PM unadjusted inbound peak hour trips. Applying the assumed service utilization rates results in 68 AM vph ($118 \times 0.57 = 67.25$) and 32 PM vph ($53 \times 0.6 = 31.8$) expected to use the drive-through window. Based on the assumed service rate of 90 vph and the conservative AM service utilization, the expected traffic intensity for the proposed Coffee/Donut Shop with Drive-Through Window is 0.76 ($68\text{vph}/90\text{vph}$). Based on LADOT MPP Section 321 Appendix B, the 99th-percentile queue would be approximately 7 vehicles. Therefore, the proposed 14 queue spaces for the drive-through lane would adequately satisfy the anticipated queue, based on service utilization and average service rates following the LADOT methodology of the queuing analysis.

9. Mitigations

The following mitigations measures are suggested at the intersections where the project contributed to degrading the level of service from the current LOS grade (under existing conditions) to a lower grade (Exhibit 20):

- *2. W Lugonia Ave & HD Parking Lot*

Increasing the cycle length to 100 sec and optimizing the splits lead to an improvement in the level of service to LOS C at the PM peak hour with a reduction in delays to 33 sec.

- *4. W Lugonia Ave & Texas St*

Changing lanes configuration of the NB approach (one NB left turn lane with a storage length of 40 ft and one NB through and right turn lane) leads to an improvement in the level of service to LOS C at the PM peak hour with a reduction in delays to 21.2 sec.

Exhibit 20. Impact of proposed mitigation measures

Intersection	Control Type	Peak Hour	Existing + Project		Existing + Project With Mitigations	
			Delay	LOS	Delay	LOS
2. W Lugonia & HD Parking Lot	Signalized	PM	96.3	F	33.0	C
4. W Lugonia & Texas	Signalized	PM	66.3	E	21.2	C

The Development Impact Fees (DIF) will be used to implement the mitigation measures as well as other improvements deemed necessary.



10. Equitable Access and Caltrans Encroachment Permit

To ensure equitable access, it should be noted that if any Caltrans facilities are impacted by the project, they must comply with the American Disabilities Act (ADA) Standards upon project completion. Additionally, the project must ensure the maintenance of bicycle and pedestrian access throughout the construction phase. These access considerations align with Caltrans' equity mission to provide a safe, sustainable, and equitable transportation network for all users.

Finally, any permanent work or temporary traffic control that encroaches onto Caltrans' Right-of-Way (R/W) requires a Caltrans-issued encroachment permit.

Appendices

Appendix A: Scoping Memorandum

Appendix B: Count Data

Appendix C: Synchro Analysis



Appendix A: Scoping Memorandum





SCOPING MEMORANDUM

Date:	May 20, 2025	GTS: 250412
To:	City of Redlands (Attention of Mr. Don Young)	
From:	GTS	
cc:	Chambers Group	
Subject:	Traffic Impact Study Scoping and Vehicle Miles Traveled (VMT) Screening	
Project:	Redlands Marketplace	

GTS is pleased to present the Traffic Impact Study Scoping and Vehicle Miles Traveled (VMT) Screening memorandum for the purposes of conducting a traffic analysis of the above-mentioned project in the City of Redlands.

This memorandum consists of project description, level of service analysis scoping (trip generation, trip distribution and assignment, and study area) as well as the VMT screening.

We seek your review and confirmation on behalf of the City to proceed with the traffic impact study.

BRIEF PROJECT DESCRIPTION

The project (Redlands Marketplace) proposes to construct a new shopping center with 36,000 SF grocery store, four multi-tenant pad buildings (total area of 31,500 SF), and one drive-through restaurant (2,700 SF) on an approximately 14.5-acre site.

The project site is located at the northeast corner of West Lugonia Avenue and Tennessee Street (APN: 0167-171-16-0000) within the Special Development (EV/SD) District of the East Valley Corridor Specific Plan.

The project site plan is attached as Exhibit 1. The location within the City of Redlands is shown in Exhibit 2.

SCOPE OF THE TRAFFIC STUDY

This scope is based on the City of Redlands traffic study requirements, including Measure U, the *City of Redlands CEQA Assessment VMT Analysis Guidelines* and in accordance with the San Bernardino County Association of Governments (SANBAG) Congestion Management Program (CMP) requirements.

The following two traffic assessments will be evaluated for the proposed project:

1. A Level of Service (LOS) analysis for compliance with the City's Measure U requirements
2. A vehicle miles traveled (VMT) analysis for compliance with the requirements of the California Environmental Quality Act (CEQA)



LEVEL OF SERVICE ANALYSIS

Level of Service (LOS) is a qualitative measure describing operational conditions within a traffic stream, and the perception of those conditions by motorists and passengers. LOS is typically graded from A to F with A representing free-flow and F representing significant congestion and delays.

The City of Redlands Measure U establishes minimum Level of Service standards, which require that City intersections be maintained at LOS C or better during the morning and evening peak hours.

Traffic effects at an intersection are considered to be significant if the addition of project traffic causes an intersection to operate deficiently (LOS D, E, or F). According to Measure U, “any location where the level of service is below LOS C at the time an application is submitted, mitigation shall be imposed on that development project to assure, at a minimum, that the level of traffic service is maintained at levels of service that are no worse than those existing at the time of application for development is filed, except as provided in Section 5.20b.” (Source: City of Redlands General Plan 2035)

New development is required to offset effects where the project results in a significant effect according to the City of Redland’s Measure U requirements. The Level of Service with project must be improved to offset the project’s effect.

Trip Generation

Trip generation calculations use the trip generation rates of the Institute of Transportation Engineers (ITE) Trip Generation Manual (TGM), 11th Edition (2021) for Coffee/Donut Shop with Drive-Through Window (Land Use Code 937) and Shopping Plaza (40k-150k square feet) (Land Use Code 821).

While no pass-by rates for Land Use Code 937 were reported in the TGM, the rates for LUC 934 (Fast Food Restaurant) were used as a proxy, i.e., 50% in the AM peak hour and 55% in the PM peak hour with the daily pass-by rate assumed as 50% (the lower of the two). The pass-by rates for LUC 810 are 40% for the PM peak, with the same rate assumed for the daily and AM peak periods.

Table 1 summarizes the estimated trip generation for the project site on a typical weekday during the AM peak and PM peak hours for the peak hour. As shown, the project is expected to generate 4,547 daily trips, 259 AM peak hour trips, and 413 PM peak hour trips.



Table 1: Project Trip Generation

Land Use	Land Use Code	Units	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Trip Rates¹									
Coffee/Donut Shop with Drive-Through Window	937	TSF	533.57	43.80	42.08	85.88	19.50	19.50	38.99
Shopping Plaza (40 to 150k)	821	TSF	94.49	2.19	1.34	3.53	4.33	4.70	9.03
Trip Generation									
Coffee/Donut Shop with Drive-Through Window		2,700	1,441	118	114	232	53	53	105
Shopping Plaza (40 to 150k)		67,500	6,378	148	91	238	293	317	610
Pass-By Trips									
Coffee/Donut Shop with Drive-Through Window ²			720	59	57	116	29	29	58
Shopping Plaza (40 to 150k) ³			2,551	59	36	95	117	127	244
Net New Trips			4,547	148	111	259	199	214	413

¹ Trip rates from the Institute of Transportation Engineers, Trip Generation Manual (TGM), 11th Edition, 2021 per the identified Land Use Category (LUC).

² No Pass-By rates for LUC 937; Pass-By rates for LUC 934 were used conservatively rather than LUC 938; 50% in AM Peak and 55% in PM Peak. Daily is assumed 50% (lower of both).

³ Average pass-by rate for LUC 821 Weekday PM Peak Period (40%); same rate (40%) is assumed for Daily and AM Peak Period.

Trip Distribution

The distribution of project trips onto surrounding streets, shown in Exhibit 3, was determined based on highway access and potential travel patterns.

Study Area and Assumptions

The following is a list of study intersections to be included in the study, as shown in Exhibit 3.

Intersections:

1. Lugonia Avenue at Tennessee Street
2. Lugonia Avenue at Eastern Project Driveway (A)
3. Lugonia Avenue at New York Street
4. Lugonia Avenue at Texas Street
5. Lugonia Avenue at Orange Street
6. San Bernardino Ave at Texas Street
7. San Bernardino Ave at Tennessee Street
8. San Bernardino Ave at Citrus Plaza Drive
9. Lagonia Avenue at Citrus Plaza Drive
10. I-10 EB Ramps at Tennessee Street



11. I-10 EB Ramps at Tennessee Street

The study intersections will be analyzed using the Highway Capacity Manual (HCM) methodology. The intersection analysis for the traffic study will be accomplished using Synchro or Vistro software program. Level of Service (LOS) standards for the traffic study will be in accordance with Measure U in the City of Redlands.

Study Scenarios

Per the requirements of Measure U the following two scenarios will be analyzed

- Existing Conditions
- Existing Conditions Plus Project

Special Considerations

The traffic study will also include an evaluation of site access, on-site circulation, queuing for the drive through lane, and truck turning templates.

VEHICLE MILES TRAVELED (VMT) SCREENING ANALYSIS

Background

On December 28, 2018, the California Office of Administrative Law cleared the revised California Environmental Quality Act (CEQA) guidelines for use. Among the changes to the guidelines was removal of vehicle delay and level of service from consideration under CEQA. With the adopted guidelines, transportation impacts are to be evaluated based on a project's effect on vehicle miles traveled (VMT).

VMT Screening Analysis

The *"City of Redlands CEQA Assessment VMT Analysis Guidelines"* provide details on screening thresholds that can be used to identify when a proposed land use project is anticipated to result in a less-than-significant impact without conducting a more detailed level analysis. Screening thresholds follow three steps:

1. Transit Priority Area (TPA) Screening
2. Low VMT Area Screening
3. Project Type Screening

1. Transit Priority Area (TPA) Screening

Projects located within a TPA may be presumed to have a less-than-significant impact. A TPA is defined as a half-mile area around an existing major transit stop or an existing stop along a high-quality transit corridor. 'Major transit stop' means a site containing an existing rail 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 evening peak commute periods. A 'high-quality transit corridor' means a corridor with a fixed route bus service with service intervals no longer than 15 minutes during the peak commute hours.



However, this presumption cannot be applied if a project's floor area ratio (FAR) is less than 0.75 which is the case in the project at hand. Furthermore, the project is not located in a TPA per the SBCTA VMT screening tool Exhibit 4.

The TPA Screening criterion is NOT met.

2. Low VMT Area Screening

Projects located within a low VMT generating area (VMT per worker, 15% below County baseline) may be presumed to have a less-than-significant impact. Based on the SBCTA VMT Screening Tool, the project is located in a Low VMT Area. The results of the SBCTA VMT Screening Tool are provided in Exhibit 4..

The Low VMT Area Screening criterion is met.

3. Project Type Screening

Projects which serve the local community and have the potential to reduce VMT should not be required to complete a VMT assessment. Projects which generate less than 3,000 MT CO₂e per year can be presumed to have a less than-significant impact on VMT. Projects which generate less than 3,000 MT CO₂e per year include the following:

- Single family residential - 167 dwelling units or fewer
- Multi-family (low-rise) – 232 dwelling units or fewer
- Multi-family (mid-rise) – 299 dwelling units or fewer
- Office – 59,100 SF or less
- Local Serving Retail – 112,400 square feet or less (no stores larger than 50,000 square feet)
- Warehousing – 463,600 SF or less
- Light Industrial – 74,600 SF or less

The proposed retail project is less than 112,400 square feet and is intended to serve the local community. In addition, per Attachment 1 of the City of Redlands CEQA Assessment VMT Analysis Guidelines, based on the proposed use and estimated daily trips for the project, the proposed project would generate less than 3,000 MT CO₂e per year. As a result, the proposed project can be presumed to have a less-than-significant VMT impact and would meet the Project Type Screening criteria.

The Project Type Screening criterion is met.

Based on review of the VMT screening criteria, the project meets the Project Type screening thresholds. Therefore, the project would result in a less-than-significant transportation impact, and no additional VMT analysis is required.

List of Exhibits

Exhibit 1. Site plan (Source: City of Redlands)	6
Exhibit 2. Location Map (Source: City of Redlands)	7
Exhibit 3. Trip Distribution and Study Intersections	8
Exhibit 4. SGCTA VMT Screening Analysis.....	9



Exhibit 1. Site plan (Source: City of Redlands)

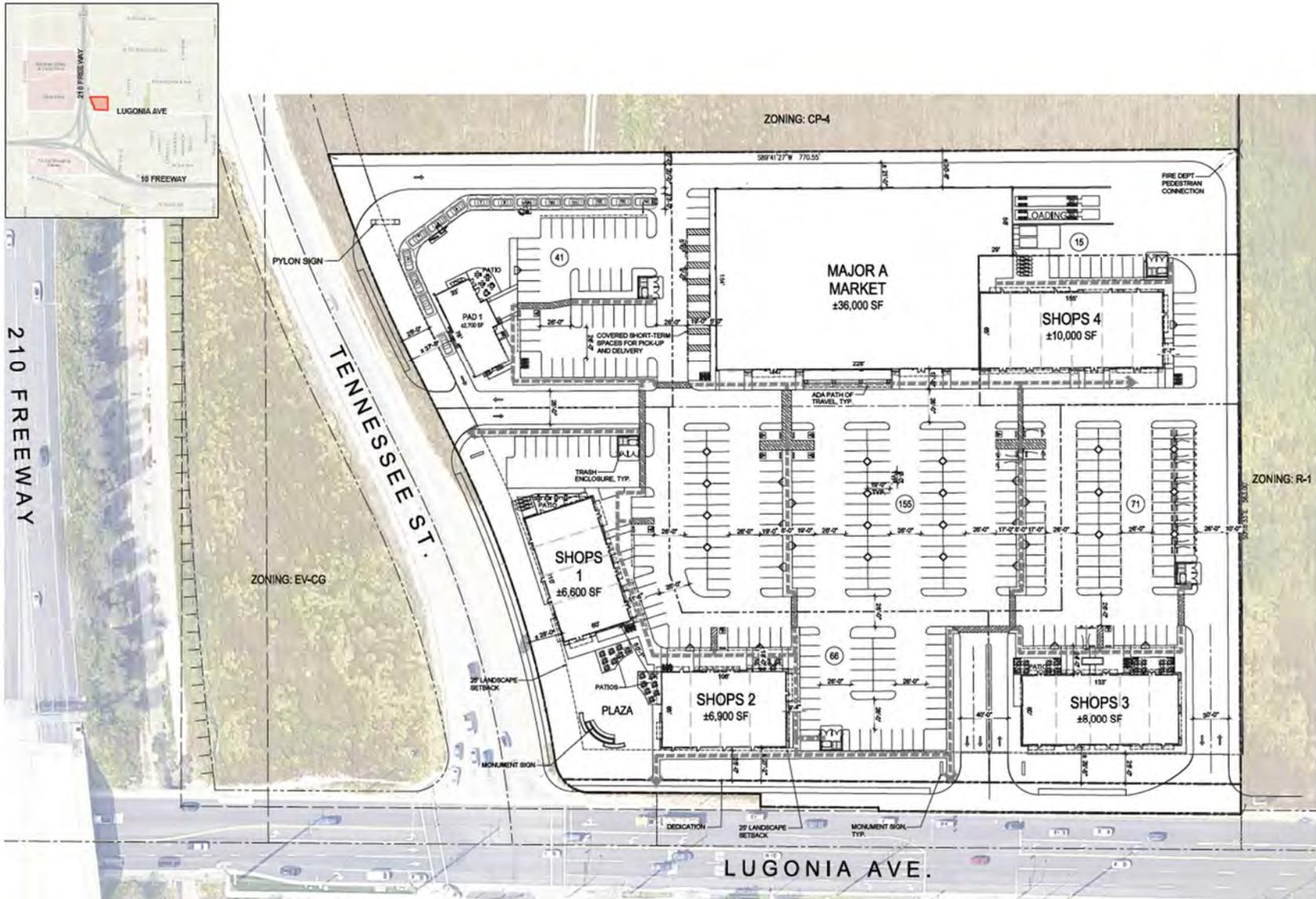


Exhibit 2. Location Map (Source: City of Redlands)

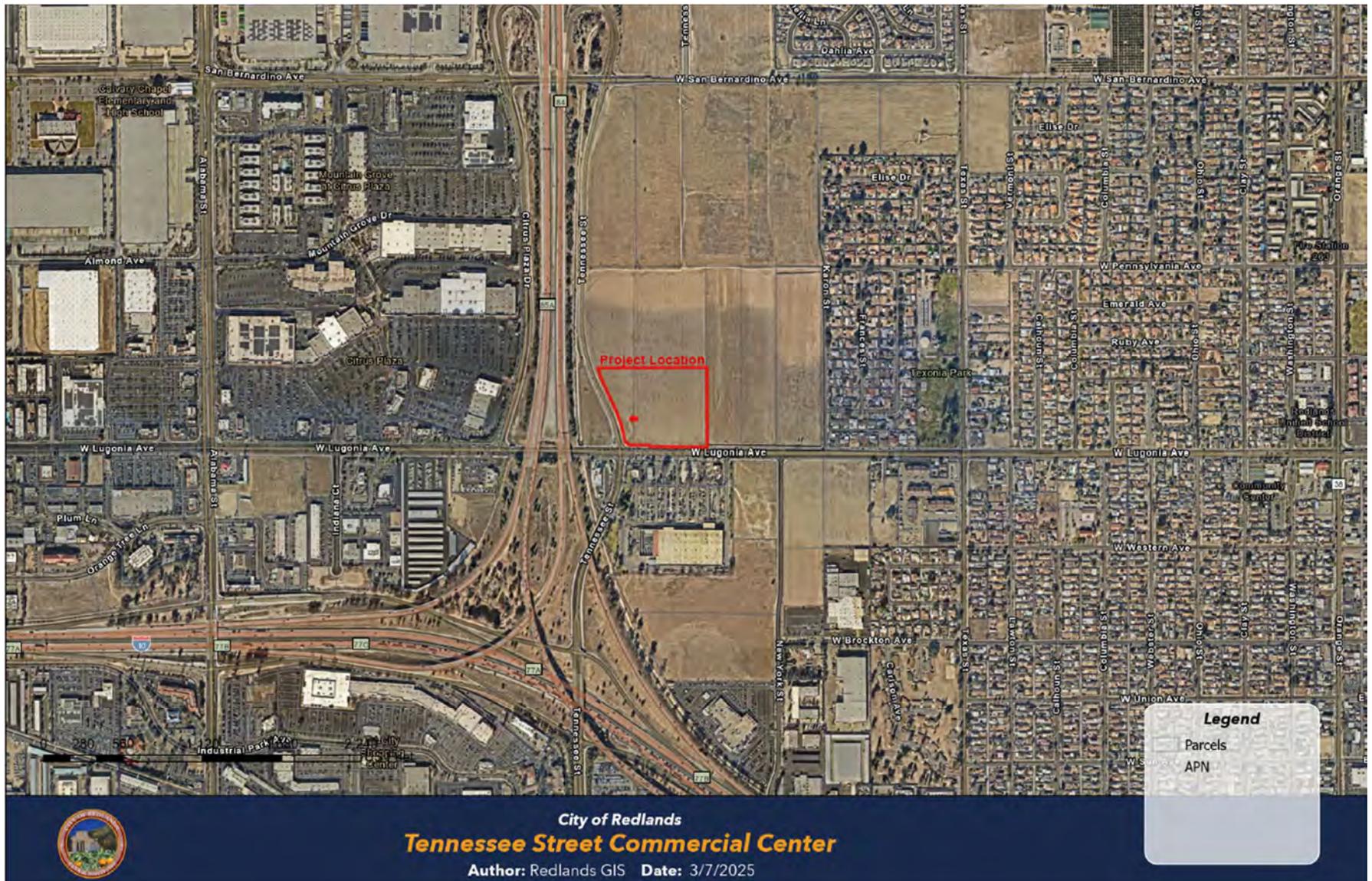
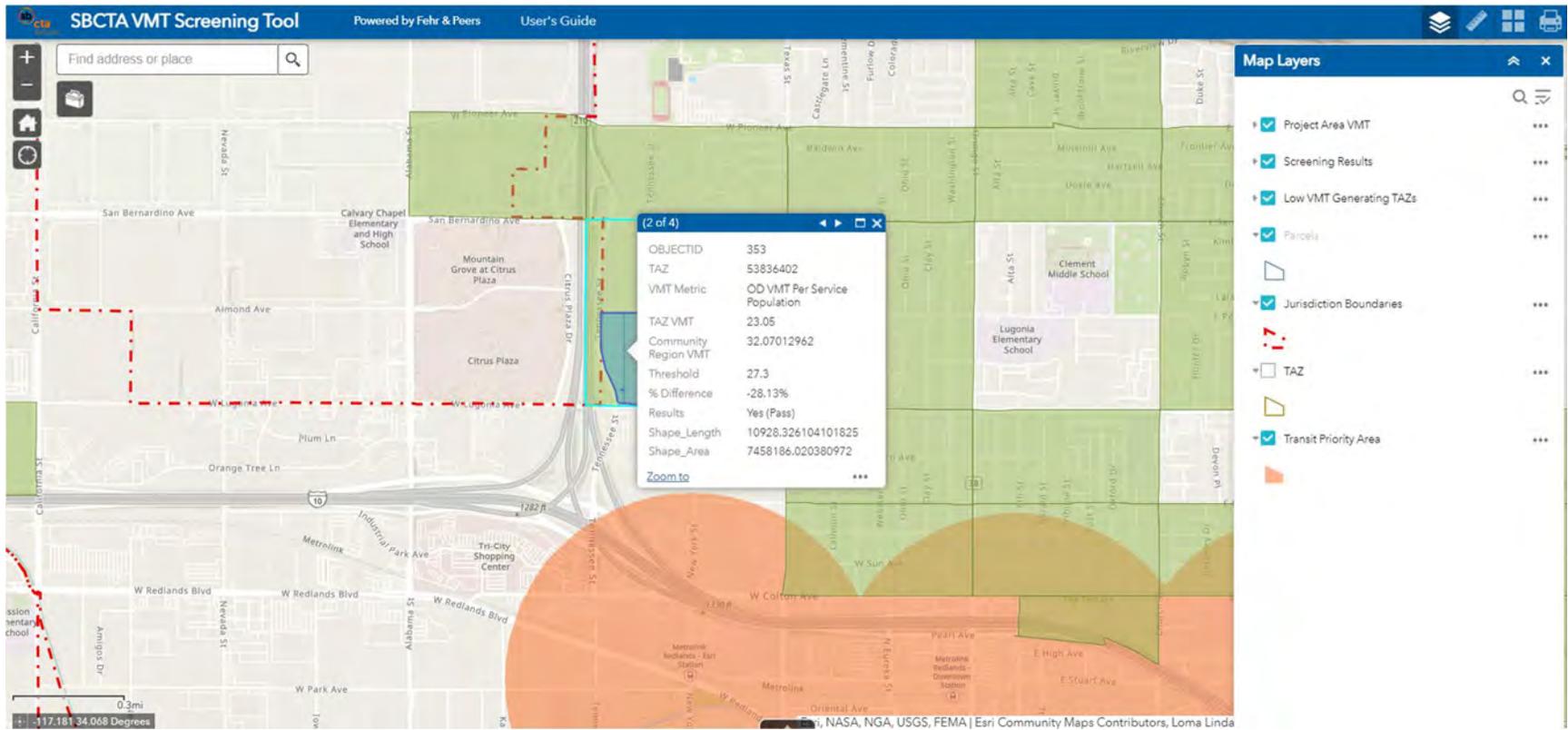


Exhibit 4. SGCTA VMT Screening Analysis



Appendix B: Count Data



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Wed, May 28, 25

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Redlands
Tennessee St
W Lugonia Ave

PROJECT #: SC5434
LOCATION #: 1
CONTROL: SIGNAL

NOTES:	AM		▲	N	
	PM				
	MD	◀ W			E ▶
	OTHER		S		
	OTHER		▼		

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL	
	Tennessee St			Tennessee St			W Lugonia Ave			W Lugonia Ave				
	LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT		WR
AM	7:00 AM	12	34	13	6	18	0	3	19	26	21	39	18	209
	7:15 AM	13	40	17	14	21	0	5	37	36	29	66	28	306
	7:30 AM	16	52	12	17	27	0	9	42	28	44	74	27	348
	7:45 AM	30	49	19	20	32	2	4	45	30	22	103	27	383
	8:00 AM	27	65	29	20	20	2	1	44	37	25	99	39	408
	8:15 AM	27	55	14	17	27	1	8	71	52	29	91	27	419
	8:30 AM	40	69	21	11	20	2	4	51	32	18	92	38	398
	8:45 AM	35	49	19	18	25	2	10	64	46	27	94	18	407
	VOLUMES	200	413	144	123	190	9	44	373	287	215	658	222	2,878
	APPROACH %	26%	55%	19%	38%	59%	3%	6%	53%	41%	20%	60%	20%	
APP/DEPART	757	/	679	322	/	692	704	/	640	1,095	/	867	0	
BEGIN PEAK HR	8:00 AM													
VOLUMES	129	238	83	66	92	7	23	230	167	99	376	122	1,632	
APPROACH %	29%	53%	18%	40%	56%	4%	5%	55%	40%	17%	63%	20%		
PEAK HR FACTOR	0.865			0.917			0.802			0.916			0.974	
APP/DEPART	450	/	383	165	/	358	420	/	379	597	/	512	0	
PM	4:00 PM	67	84	59	23	22	1	30	180	94	17	92	47	716
	4:15 PM	63	83	71	35	25	1	10	179	122	22	76	32	719
	4:30 PM	67	81	51	25	20	3	13	178	91	19	80	39	667
	4:45 PM	57	86	73	21	30	6	24	172	113	23	100	28	733
	5:00 PM	71	95	64	27	31	7	24	206	94	16	82	45	762
	5:15 PM	81	82	63	27	23	7	16	200	108	25	97	33	762
	5:30 PM	62	79	76	25	22	3	12	215	117	22	93	32	758
	5:45 PM	71	70	57	31	18	1	12	180	80	27	114	28	689
	VOLUMES	539	660	514	214	191	29	141	1,510	819	171	734	284	5,806
	APPROACH %	31%	39%	30%	49%	44%	7%	6%	61%	33%	14%	62%	24%	
APP/DEPART	1,713	/	1,085	434	/	1,181	2,470	/	2,238	1,189	/	1,302	0	
BEGIN PEAK HR	4:45 PM													
VOLUMES	271	342	276	100	106	23	76	793	432	86	372	138	3,015	
APPROACH %	30%	38%	31%	44%	46%	10%	6%	61%	33%	14%	62%	23%		
PEAK HR FACTOR	0.966			0.881			0.945			0.961			0.989	
APP/DEPART	889	/	556	229	/	624	1,301	/	1,169	596	/	666	0	

U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

0	0	0	0
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0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

0	0	0	0
---	---	---	---



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Wed, May 28, 25

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Redlands
Driveway
W Lugonia Ave

PROJECT #: SC5434
LOCATION #: 2
CONTROL: SIGNAL

NOTES:	AM		▲	N	
	PM				
	MD	◀	W	E	▶
	OTHER		S		
	OTHER		▼		

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	Driveway			Driveway			W Lugonia Ave			W Lugonia Ave			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
LANES:	0	X	0	X	X	X	X	2	1	1	1	X	
AM													
7:00 AM	11	0	8	0	0	0	0	32	6	4	71	0	132
7:15 AM	8	0	9	0	0	0	0	47	21	7	115	0	207
7:30 AM	14	0	7	0	0	0	0	49	22	9	131	0	232
7:45 AM	13	0	16	0	0	0	0	61	23	5	139	0	257
8:00 AM	21	0	13	0	0	0	0	78	15	7	142	0	276
8:15 AM	18	0	14	0	0	0	0	76	26	6	129	0	269
8:30 AM	25	0	10	0	0	0	0	65	18	9	123	0	250
8:45 AM	23	0	11	0	0	0	0	79	20	6	116	0	255
VOLUMES	133	0	88	0	0	0	0	487	151	53	966	0	1,878
APPROACH %	60%	0%	40%	0%	0%	0%	0%	76%	24%	5%	95%	0%	
APP/DEPART	221	/	0	0	/	204	638	/	575	1,019	/	1,099	0
BEGIN PEAK HR	7:45 AM												
VOLUMES	77	0	53	0	0	0	0	280	82	27	533	0	1,052
APPROACH %	59%	0%	41%	0%	0%	0%	0%	77%	23%	5%	95%	0%	
PEAK HR FACTOR	0.929			0.000			0.887			0.940			0.953
APP/DEPART	130	/	0	0	/	109	362	/	333	560	/	610	0
PM													
4:00 PM	24	0	25	0	0	0	0	239	23	7	132	0	450
4:15 PM	23	0	18	0	0	0	0	258	27	7	107	0	440
4:30 PM	29	0	18	0	0	0	0	237	17	12	109	0	422
4:45 PM	18	0	17	0	0	0	0	246	20	10	133	0	444
5:00 PM	17	0	22	0	0	0	0	267	30	8	126	0	470
5:15 PM	23	0	23	0	0	0	0	258	32	6	132	0	474
5:30 PM	25	0	27	0	0	0	0	285	26	11	123	0	497
5:45 PM	22	0	12	0	0	0	0	259	9	14	147	0	463
VOLUMES	181	0	162	0	0	0	0	2,049	184	75	1,009	0	3,661
APPROACH %	53%	0%	47%	0%	0%	0%	0%	92%	8%	7%	93%	0%	
APP/DEPART	343	/	0	0	/	259	2,233	/	2,212	1,085	/	1,190	0
BEGIN PEAK HR	5:00 PM												
VOLUMES	87	0	84	0	0	0	0	1,069	97	39	528	0	1,905
APPROACH %	51%	0%	49%	0%	0%	0%	0%	92%	8%	7%	93%	0%	
PEAK HR FACTOR	0.822			0.000			0.937			0.877			0.958
APP/DEPART	171	/	0	0	/	136	1,166	/	1,154	568	/	615	0

U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

0 0 0 0

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1
0	0	0	1	1

0 0 0 1



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Wed, May 28, 25

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Redlands
New York St
W Lugonia Ave

PROJECT #: SC5434
LOCATION #: 3
CONTROL: SIGNAL

NOTES:	AM		▲	N	
	PM				
	MD	◀	W	E	▶
	OTHER			S	
	OTHER			▼	

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	New York St			New York St			W Lugonia Ave			W Lugonia Ave			
	LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	
	0.5	X	0.5	X	X	X	X	2	1	1	1	X	
AM	7:00 AM	7	0	1	0	0	0	37	13	4	73	0	135
	7:15 AM	14	0	1	0	0	0	47	20	7	115	0	204
	7:30 AM	13	0	0	0	0	0	46	14	14	147	0	234
	7:45 AM	21	0	6	0	0	0	74	22	15	141	0	279
	8:00 AM	29	0	7	0	0	0	77	24	12	150	0	299
	8:15 AM	16	0	6	0	0	0	89	21	6	134	0	272
	8:30 AM	23	0	4	0	0	0	67	16	12	123	0	245
	8:45 AM	21	0	13	0	0	0	81	35	11	117	0	278
	VOLUMES	144	0	38	0	0	0	518	165	81	1,000	0	1,947
	APPROACH %	79%	0%	21%	0%	0%	0%	0%	76%	24%	7%	93%	0%
APP/DEPART	182	/	0	0	/	246	684	/	556	1,081	/	1,145	0
BEGIN PEAK HR	7:45 AM												
VOLUMES	89	0	23	0	0	0	0	307	83	45	548	0	1,096
APPROACH %	79%	0%	21%	0%	0%	0%	0%	79%	21%	8%	92%	0%	
PEAK HR FACTOR	0.778			0.000			0.889			0.915			0.913
APP/DEPART	112	/	0	0	/	128	391	/	330	593	/	638	0
PM	4:00 PM	54	0	10	0	0	0	242	47	6	102	0	461
	4:15 PM	39	0	13	0	0	0	260	54	7	90	0	463
	4:30 PM	50	0	20	0	0	0	216	48	6	96	0	436
	4:45 PM	42	0	16	0	0	0	252	57	15	105	0	487
	5:00 PM	56	0	14	0	0	0	249	54	5	106	0	484
	5:15 PM	38	0	10	0	0	0	247	52	5	100	0	452
	5:30 PM	43	0	10	0	0	0	276	63	2	101	0	495
	5:45 PM	54	0	11	0	0	0	236	47	9	117	0	474
	VOLUMES	376	0	104	0	0	0	1,978	422	55	817	0	3,752
	APPROACH %	78%	0%	22%	0%	0%	0%	0%	82%	18%	6%	94%	0%
APP/DEPART	480	/	0	0	/	477	2,400	/	2,082	872	/	1,193	0
BEGIN PEAK HR	4:45 PM												
VOLUMES	179	0	50	0	0	0	0	1,024	226	27	412	0	1,918
APPROACH %	78%	0%	22%	0%	0%	0%	0%	82%	18%	6%	94%	0%	
PEAK HR FACTOR	0.818			0.000			0.922			0.915			0.969
APP/DEPART	229	/	0	0	/	253	1,250	/	1,074	439	/	591	0

U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	1	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	1	0	1

0	0	1	0
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0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

0	0	0	0
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INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Wed, May 28, 25

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Redlands
Texas St
W Lugonia Ave

PROJECT #: SC5434
LOCATION #: 4
CONTROL: SIGNAL

NOTES:	AM		▲ N	
	PM		◀ W	E ▶
	MD		S	
	OTHER		▼	
	OTHER			

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL	
	Texas St			Texas St			W Lugonia Ave			W Lugonia Ave				
	LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT		WR
	0	1	1	0	1	1	1	1.5	0.5	1	2	0		
AM	7:00 AM	4	19	5	1	26	6	2	27	9	14	56	4	173
	7:15 AM	7	29	9	1	40	9	5	32	9	15	109	3	268
	7:30 AM	17	37	11	2	50	14	1	39	3	31	115	3	323
	7:45 AM	11	32	19	4	70	17	4	58	13	38	119	2	387
	8:00 AM	17	44	18	3	59	8	8	62	10	24	126	5	384
	8:15 AM	6	46	13	8	86	17	10	61	16	30	107	4	404
	8:30 AM	16	26	14	5	49	15	5	50	13	39	95	2	329
	8:45 AM	15	27	12	2	48	15	6	65	22	25	93	3	333
	VOLUMES	93	260	101	26	428	101	41	394	95	216	820	26	2,601
	APPROACH %	20%	57%	22%	5%	77%	18%	8%	74%	18%	20%	77%	2%	
	APP/DEPART	454	/	327	555	/	739	530	/	521	1,062	/	1,014	0
	BEGIN PEAK HR	7:45 AM												
	VOLUMES	50	148	64	20	264	57	27	231	52	131	447	13	1,504
	APPROACH %	19%	56%	24%	6%	77%	17%	9%	75%	17%	22%	76%	2%	
	PEAK HR FACTOR	0.829			0.768			0.891			0.929			0.931
	APP/DEPART	262	/	188	341	/	447	310	/	315	591	/	554	0
PM	4:00 PM	14	41	19	6	51	14	12	211	27	23	84	5	507
	4:15 PM	20	59	38	7	53	3	12	201	33	15	63	3	507
	4:30 PM	18	66	26	2	41	7	9	182	29	15	77	3	475
	4:45 PM	18	56	22	6	50	14	19	198	32	18	82	5	520
	5:00 PM	30	67	28	4	53	7	9	204	27	13	78	6	526
	5:15 PM	20	74	25	7	53	10	12	195	30	20	63	7	516
	5:30 PM	18	64	19	4	41	10	21	221	32	14	76	6	526
	5:45 PM	19	62	23	6	50	11	19	177	15	12	84	7	485
	VOLUMES	157	489	200	42	392	76	113	1,589	225	130	607	42	4,062
	APPROACH %	19%	58%	24%	8%	77%	15%	6%	82%	12%	17%	78%	5%	
	APP/DEPART	846	/	644	510	/	747	1,927	/	1,831	779	/	840	0
	BEGIN PEAK HR	4:45 PM												
	VOLUMES	86	261	94	21	197	41	61	818	121	65	299	24	2,088
	APPROACH %	20%	59%	21%	8%	76%	16%	6%	82%	12%	17%	77%	6%	
	PEAK HR FACTOR	0.882			0.925			0.912			0.924			0.992
	APP/DEPART	441	/	346	259	/	383	1,000	/	933	388	/	426	0

U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

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0	0	0	0	0
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0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

0	0	0	0
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INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Wed, May 28, 25

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Redlands
Orange St
W Lugonia Ave

PROJECT #: SC5434
LOCATION #: 5
CONTROL: SIGNAL

NOTES:	AM PM MD OTHER OTHER	◀ W	▲ N S ▼	E ▶
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	NORTHBOUND Orange St			SOUTHBOUND Orange St			EASTBOUND W Lugonia Ave			WESTBOUND W Lugonia Ave			TOTAL
	NL 1	NT 1	NR 1	SL 1	ST 1	SR 1	EL 1	ET 2	ER 0	WL 1	WT 1	WR 1	
AM													
7:00 AM	9	35	16	10	42	6	5	28	8	46	73	14	292
7:15 AM	8	38	4	7	54	11	7	23	6	38	108	25	329
7:30 AM	6	49	22	14	77	14	8	26	14	46	126	44	446
7:45 AM	8	55	11	21	68	13	11	48	16	25	125	35	436
8:00 AM	8	57	10	22	75	10	8	57	4	39	134	33	457
8:15 AM	11	50	14	18	78	9	13	65	13	27	132	44	474
8:30 AM	9	44	13	23	100	13	9	36	10	36	106	28	427
8:45 AM	10	40	9	20	80	10	7	48	10	23	97	20	374
VOLUMES	69	368	99	135	574	86	68	331	81	280	901	243	3,236
APPROACH %	13%	69%	18%	17%	72%	11%	14%	69%	17%	20%	63%	17%	
APP/DEPART	536	/	679	795	/	935	480	/	566	1,425	/	1,056	0
BEGIN PEAK HR	7:30 AM												
VOLUMES	33	211	57	75	298	46	40	196	47	137	517	156	1,814
APPROACH %	11%	70%	19%	18%	71%	11%	14%	69%	17%	17%	64%	19%	
PEAK HR FACTOR	0.977			0.979			0.777			0.939			0.955
APP/DEPART	301	/	407	419	/	482	283	/	329	811	/	596	0
PM													
4:00 PM	9	93	20	19	94	12	10	141	39	19	59	5	520
4:15 PM	12	63	12	20	83	9	9	171	45	17	70	12	523
4:30 PM	16	75	26	29	93	10	17	175	26	18	68	16	569
4:45 PM	11	74	15	27	94	14	14	153	36	22	95	18	573
5:00 PM	16	82	18	32	60	10	13	173	35	18	73	18	548
5:15 PM	13	99	28	24	70	20	7	175	31	17	60	17	561
5:30 PM	19	85	28	27	85	13	14	175	31	17	65	16	575
5:45 PM	21	56	12	24	71	15	10	150	24	17	75	21	496
VOLUMES	117	627	159	202	650	103	94	1,313	267	145	565	123	4,369
APPROACH %	13%	69%	18%	21%	68%	11%	6%	78%	16%	17%	68%	15%	
APP/DEPART	903	/	844	955	/	1,062	1,674	/	1,678	837	/	785	0
BEGIN PEAK HR	4:45 PM												
VOLUMES	59	340	89	110	309	57	48	676	133	74	293	69	2,260
APPROACH %	12%	70%	18%	23%	65%	12%	6%	79%	16%	17%	67%	16%	
PEAK HR FACTOR	0.871			0.881			0.969			0.807			0.981
APP/DEPART	488	/	457	476	/	516	857	/	878	439	/	409	0

U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1
0	0	0	0	0
0	0	0	1	1

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0	0	0	0	0
0	0	0	1	1
0	0	0	0	0
0	0	0	1	1
0	0	0	0	0
0	0	0	1	1
0	0	0	1	1
0	0	0	0	0
0	0	0	4	4

0	0	0	3
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INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Wed, May 28, 15

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Redlands
Texas St
W San Bernardino Ave

PROJECT #: SC5434
LOCATION #: 6
CONTROL: SIGNAL

NOTES:	AM		▲	
	PM		N	
	MD	◀ W		E ▶
	OTHER		S	
	OTHER		▼	

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL	
	Texas St			Texas St			W San Bernardino Ave			W San Bernardino Ave				
	LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT		WR
	0	1	0	1	1	1	1	1	0	1	1	1		
AM	7:00 AM	17	10	3	5	18	26	22	36	5	2	144	2	290
	7:15 AM	21	23	2	6	20	24	16	52	8	11	134	10	327
	7:30 AM	13	23	7	15	34	36	23	87	6	8	153	24	429
	7:45 AM	12	33	4	9	43	36	13	76	7	19	159	23	434
	8:00 AM	8	46	8	9	33	37	43	72	4	7	139	52	458
	8:15 AM	9	56	7	27	69	42	32	73	6	15	95	85	516
	8:30 AM	12	22	4	30	48	34	9	79	10	10	117	29	404
	8:45 AM	12	16	7	9	22	20	13	79	10	12	109	15	324
	VOLUMES	104	229	42	110	287	255	171	554	56	84	1,050	240	3,182
	APPROACH %	28%	61%	11%	17%	44%	39%	22%	71%	7%	6%	76%	17%	
APP/DEPART	375	/	640	652	/	427	781	/	706	1,374	/	1,409	0	
BEGIN PEAK HR	7:30 AM													
VOLUMES	42	158	26	60	179	151	111	308	23	49	546	184	1,837	
APPROACH %	19%	70%	12%	15%	46%	39%	25%	70%	5%	6%	70%	24%		
PEAK HR FACTOR	0.785			0.707			0.929			0.969			0.890	
APP/DEPART	226	/	453	390	/	251	442	/	394	779	/	739	0	
PM	4:00 PM	19	29	15	10	47	12	16	144	9	5	78	5	389
	4:15 PM	20	29	11	4	29	15	15	165	8	9	85	7	397
	4:30 PM	22	27	16	10	21	10	16	152	15	10	94	7	400
	4:45 PM	16	39	11	9	48	14	17	161	7	11	89	4	426
	5:00 PM	23	31	9	7	44	12	9	154	14	11	79	4	397
	5:15 PM	19	38	21	10	44	6	10	160	20	6	84	8	426
	5:30 PM	20	47	10	11	26	16	16	147	11	5	86	11	406
	5:45 PM	13	28	15	4	32	24	20	171	19	8	86	11	431
	VOLUMES	152	268	108	65	291	109	119	1,254	103	65	681	57	3,272
	APPROACH %	29%	51%	20%	14%	63%	23%	8%	85%	7%	8%	85%	7%	
APP/DEPART	528	/	444	465	/	459	1,476	/	1,427	803	/	942	0	
BEGIN PEAK HR	5:00 PM													
VOLUMES	75	144	55	32	146	58	55	632	64	30	335	34	1,660	
APPROACH %	27%	53%	20%	14%	62%	25%	7%	84%	9%	8%	84%	9%		
PEAK HR FACTOR	0.878			0.937			0.894			0.950			0.963	
APP/DEPART	274	/	233	236	/	240	751	/	719	399	/	468	0	

U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

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INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Wed, May 28, 25

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Redlands
Tennessee St
W San Bernardino Ave

PROJECT #: SC5434
LOCATION #: 7
CONTROL: SIGNAL

NOTES:	AM PM MD OTHER OTHER	<div style="display: flex; justify-content: space-around; align-items: center;"> ◀ W ▲ N E ▶ </div> <div style="display: flex; justify-content: center; align-items: center;"> ▼ S </div>
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LANES:	NORTHBOUND <small>Tennessee St</small>			SOUTHBOUND <small>SR-210 NB Ramps</small>			EASTBOUND <small>W San Bernardino Ave</small>			WESTBOUND <small>W San Bernardino Ave</small>			TOTAL
	NL 1	NT 2	NR 0	SL 1	ST 0.5	SR 0.5	EL 2	ET 1	ER 1	WL 1	WT 1	WR 1	
AM													
7:00 AM	2	52	3	28	1	27	29	40	23	1	146	62	414
7:15 AM	9	53	3	40	1	25	27	60	32	2	128	61	441
7:30 AM	11	81	3	58	4	33	38	92	35	5	113	94	567
7:45 AM	8	62	9	37	3	29	47	95	44	9	140	99	582
8:00 AM	6	84	4	61	6	28	47	121	28	6	125	76	592
8:15 AM	8	79	5	51	5	27	57	137	25	14	125	76	609
8:30 AM	9	101	0	40	4	7	55	88	23	6	117	88	538
8:45 AM	6	74	4	32	5	19	39	69	33	8	104	45	438
VOLUMES	59	586	31	347	29	195	339	702	243	51	998	601	4,181
APPROACH %	9%	87%	5%	61%	5%	34%	26%	55%	19%	3%	60%	36%	
APP/DEPART	676	/	1,526	571	/	323	1,284	/	1,080	1,650	/	1,252	0
BEGIN PEAK HR	7:30 AM												
VOLUMES	33	306	21	207	18	117	189	445	132	34	503	345	2,350
APPROACH %	9%	85%	6%	61%	5%	34%	25%	58%	17%	4%	57%	39%	
PEAK HR FACTOR	0.947		0.900		0.874		0.889						0.965
APP/DEPART	360	/	840	342	/	184	766	/	673	882	/	653	0
PM													
4:00 PM	8	114	10	68	8	30	146	123	33	6	66	58	670
4:15 PM	14	119	11	73	5	25	155	146	46	4	74	57	729
4:30 PM	6	134	6	59	1	28	144	157	48	10	75	53	721
4:45 PM	6	125	6	70	4	21	120	145	47	10	73	54	681
5:00 PM	11	123	6	73	5	22	164	149	39	11	85	42	730
5:15 PM	6	116	8	58	11	33	161	159	46	5	84	50	737
5:30 PM	7	105	11	59	2	28	143	148	45	5	79	51	683
5:45 PM	6	114	8	89	8	27	129	157	38	7	86	49	718
VOLUMES	64	950	66	549	44	214	1,162	1,184	342	58	622	414	5,670
APPROACH %	6%	88%	6%	68%	5%	27%	43%	44%	13%	5%	57%	38%	
APP/DEPART	1,080	/	2,526	807	/	444	2,688	/	1,800	1,095	/	900	0
BEGIN PEAK HR	4:30 PM												
VOLUMES	29	498	26	260	21	104	589	610	180	36	317	199	2,870
APPROACH %	5%	90%	5%	68%	5%	27%	43%	44%	13%	7%	57%	36%	
PEAK HR FACTOR	0.947		0.944		0.942		0.988						0.972
APP/DEPART	553	/	1,286	385	/	237	1,379	/	897	553	/	450	0

U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
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0	0	0	0	0
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0	0	0	0	0
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0	0	0	1	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1

0	0	0	1
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INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Wed, May 28, 25

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Redlands
Citrus Plaza Dr
W San Bernardino Ave

PROJECT #: SC5434
LOCATION #: 8
CONTROL: SIGNAL

<p>NOTES:</p> <p style="text-align: center; color: blue;">Queue EM PM</p>	AM PM MD OTHER OTHER	▲ N S ▼	◀ W E ▶
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	NORTHBOUND <small>Citrus Plaza Dr</small>			SOUTHBOUND <small>SR-210 SB Ramps</small>			EASTBOUND <small>W San Bernardino Ave</small>			WESTBOUND <small>W San Bernardino Ave</small>			TOTAL
	NL 1	NT 1	NR 1	SL 1	ST 1.5	SR 0.5	EL 1	ET 2	ER 0	WL 1	WT 1	WR 1	
AM													
7:00 AM	2	1	3	37	61	56	16	52	4	6	73	96	407
7:15 AM	3	0	2	58	62	74	20	59	4	4	70	88	444
7:30 AM	2	1	5	89	65	87	13	71	3	4	71	82	493
7:45 AM	2	0	8	112	99	155	12	68	6	16	78	83	639
8:00 AM	3	1	11	86	76	85	19	99	6	11	85	60	542
8:15 AM	1	3	13	116	88	105	16	90	11	20	69	71	603
8:30 AM	3	2	8	72	59	71	16	86	4	15	45	73	454
8:45 AM	1	1	10	64	116	95	8	67	5	18	55	56	496
VOLUMES	17	9	60	634	626	728	120	592	43	94	546	609	4,079
APPROACH %	20%	10%	70%	32%	31%	37%	16%	78%	6%	8%	44%	49%	
APP/DEPART	86	/	738	1,988	/	763	756	/	1,286	1,249	/	1,292	0
BEGIN PEAK HR	7:30 AM												
VOLUMES	8	5	37	403	328	432	60	328	26	51	303	296	2,278
APPROACH %	16%	10%	74%	35%	28%	37%	14%	79%	6%	8%	47%	46%	
PEAK HR FACTOR	0.735			0.794									
APP/DEPART	50	/	361	1,163	/	405	415	/	768	650	/	744	0
PM													
4:00 PM	5	10	76	59	106	52	12	167	11	33	37	34	602
4:15 PM	4	3	85	76	111	49	12	186	16	28	49	36	655
4:30 PM	5	6	80	77	127	54	10	192	17	25	52	32	677
4:45 PM	7	7	67	83	133	50	8	166	33	31	42	27	654
5:00 PM	10	8	91	80	132	56	17	181	23	24	58	36	716
5:15 PM	3	8	97	69	99	53	14	200	35	33	64	26	701
5:30 PM	9	7	69	77	122	74	16	190	21	28	56	30	699
5:45 PM	6	14	77	77	132	51	11	170	25	27	52	38	680
VOLUMES	49	63	642	598	962	439	100	1,452	181	229	410	259	5,391
APPROACH %	6%	8%	85%	30%	48%	22%	6%	83%	10%	26%	46%	29%	
APP/DEPART	755	/	422	1,999	/	1,373	1,739	/	2,692	898	/	904	0
BEGIN PEAK HR	5:00 PM												
VOLUMES	28	37	334	303	485	234	58	741	104	112	230	130	2,800
APPROACH %	7%	9%	84%	30%	47%	23%	6%	82%	11%	24%	49%	28%	
PEAK HR FACTOR	0.917			0.936									
APP/DEPART	400	/	225	1,022	/	702	906	/	1,378	472	/	495	0

U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	1	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	1	0	1

0	0	1	0
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0	0	1	0	1
0	0	1	0	1
0	0	1	0	1
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
0	0	1	0	1
0	0	2	0	2
1	0	6	0	7

1	0	3	0
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INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Wed, May 28, 25

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Redlands
Citrus Plaza Dr
W Lugonia Ave

PROJECT #: SC5434
LOCATION #: 9
CONTROL: SIGNAL

<p>NOTES:</p> <p style="text-align: center; color: blue;">Queue EB PM</p>	AM PM MD OTHER OTHER	▲ N ◀ W E ▶ S ▼
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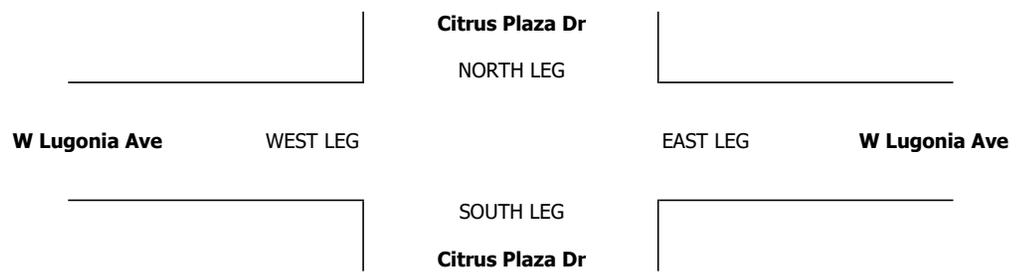
	NORTHBOUND <small>Citrus Plaza Dr</small>			SOUTHBOUND <small>Citrus Plaza Dr</small>			EASTBOUND <small>W Lugonia Ave</small>			WESTBOUND <small>W Lugonia Ave</small>			TOTAL
	NL 1	NT 0.5	NR 0.5	SL 1.5	ST 0.5	SR 1	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	
LANES:													
AM													
7:00 AM	0	0	0	30	0	24	0	18	1	0	38	13	124
7:15 AM	0	0	0	42	0	27	1	36	0	0	70	9	185
7:30 AM	0	0	0	44	0	21	5	35	0	0	77	13	195
7:45 AM	0	0	0	49	1	33	2	30	0	1	109	20	245
8:00 AM	1	0	0	57	1	19	3	31	0	3	107	18	240
8:15 AM	0	0	0	75	0	14	3	56	0	6	99	14	267
8:30 AM	0	0	0	38	3	16	5	48	0	1	108	24	243
8:45 AM	0	0	0	63	0	32	4	57	0	0	94	37	287
VOLUMES	1	0	0	398	5	186	23	311	1	11	702	148	1,787
APPROACH %	100%	0%	0%	68%	1%	32%	7%	93%	0%	1%	81%	17%	
APP/DEPART	1	/	171	589	/	17	335	/	710	862	/	889	0
BEGIN PEAK HR	8:00 AM												
VOLUMES	1	0	0	233	4	81	15	192	0	10	408	93	1,038
APPROACH %	100%	0%	0%	73%	1%	25%	7%	93%	0%	2%	80%	18%	
PEAK HR FACTOR	0.250			0.837			0.848			0.955			0.904
APP/DEPART	1	/	108	318	/	14	207	/	426	512	/	490	0
PM													
4:00 PM	2	3	5	144	2	44	22	155	1	12	101	47	538
4:15 PM	4	2	9	148	5	23	14	154	0	9	86	45	499
4:30 PM	3	2	10	138	6	47	28	134	1	10	87	53	519
4:45 PM	1	2	11	144	2	47	18	154	1	8	99	56	543
5:00 PM	2	2	15	125	3	32	29	184	0	7	96	57	552
5:15 PM	2	1	12	132	4	43	20	180	0	9	99	72	574
5:30 PM	7	1	10	155	5	41	13	179	0	9	95	54	569
5:45 PM	4	3	9	136	6	33	13	128	0	8	115	63	518
VOLUMES	25	16	81	1,122	33	310	157	1,268	3	72	778	447	4,313
APPROACH %	20%	13%	66%	77%	2%	21%	11%	89%	0%	6%	60%	34%	
APP/DEPART	122	/	621	1,466	/	108	1,428	/	2,471	1,297	/	1,113	0
BEGIN PEAK HR	4:45 PM												
VOLUMES	12	6	48	556	14	163	80	697	1	33	389	239	2,238
APPROACH %	18%	9%	73%	76%	2%	22%	10%	90%	0%	5%	59%	36%	
PEAK HR FACTOR	0.868			0.912			0.913			0.918			0.975
APP/DEPART	66	/	325	733	/	48	778	/	1,301	661	/	564	0

U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1
0	0	0	0	0
0	0	0	1	1

0	0	0	1
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0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1

0	0	0	0
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INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Wed, May 28, 25

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Redlands
Tennessee St
I-10 WB Ramps

PROJECT #: SC5434
LOCATION #: 10
CONTROL: SIGNAL

NOTES:	AM		▲	
	PM		N	
	MD	◀ W		E ▶
	OTHER		S	
	OTHER		▼	

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	Tennessee St			Tennessee St			I-10 WB Ramps			I-10 WB Ramps			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	X	X	2	0	X	X	X	0.5	1	0.5	

U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0

AM

7:00 AM	45	65	0	0	46	21	0	0	0	28	0	26	231
7:15 AM	46	62	0	0	72	34	0	0	0	38	1	24	277
7:30 AM	54	72	0	0	65	39	0	0	0	40	1	22	293
7:45 AM	53	96	0	0	86	20	0	0	0	38	1	26	320
8:00 AM	53	120	0	0	82	18	0	0	0	46	2	27	348
8:15 AM	52	110	0	0	83	32	0	0	0	36	0	19	332
8:30 AM	64	113	0	0	60	22	0	0	0	36	1	37	333
8:45 AM	55	97	0	0	102	24	0	0	0	45	0	31	354
VOLUMES	422	735	0	0	596	210	0	0	0	307	6	212	2,488
APPROACH %	36%	64%	0%	0%	74%	26%	0%	0%	0%	58%	1%	40%	
APP/DEPART	1,157	/	947	806	/	903	0	/	0	525	/	638	0

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

BEGIN PEAK HR	8:00 AM												
VOLUMES	224	440	0	0	327	96	0	0	0	163	3	114	1,367
APPROACH %	34%	66%	0%	0%	77%	23%	0%	0%	0%	58%	1%	41%	
PEAK HR FACTOR	0.938			0.839			0.000			0.921			0.965
APP/DEPART	664	/	554	423	/	490	0	/	0	280	/	323	0

0	0	0	0
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PM

4:00 PM	81	201	0	0	123	13	0	0	0	36	2	44	500
4:15 PM	60	175	0	0	148	26	0	0	0	25	2	42	478
4:30 PM	58	188	0	0	123	16	0	0	0	25	0	57	467
4:45 PM	45	187	0	0	152	18	0	0	0	40	1	43	486
5:00 PM	57	193	0	0	118	20	0	0	0	44	0	52	484
5:15 PM	45	181	0	0	152	19	0	0	0	32	3	48	480
5:30 PM	40	191	0	0	146	25	0	0	0	26	1	39	468
5:45 PM	50	165	0	0	119	14	0	0	0	24	1	53	426
VOLUMES	436	1,481	0	0	1,081	151	0	0	0	252	10	378	3,789
APPROACH %	23%	77%	0%	0%	88%	12%	0%	0%	0%	39%	2%	59%	
APP/DEPART	1,917	/	1,859	1,232	/	1,333	0	/	0	640	/	597	0
BEGIN PEAK HR	4:00 PM												
VOLUMES	244	751	0	0	546	73	0	0	0	126	5	186	1,931
APPROACH %	25%	75%	0%	0%	88%	12%	0%	0%	0%	40%	2%	59%	
PEAK HR FACTOR	0.882			0.889			0.000			0.943			0.966
APP/DEPART	995	/	937	619	/	672	0	/	0	317	/	322	0

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

0	0	0	0
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INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Wed, May 28, 15

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Redlands
Tennessee St
I-10 EB Ramps

PROJECT #: SC5434
LOCATION #: 11
CONTROL: SIGNAL

NOTES:	AM		▲	N	
	PM				
	MD	◀	W	E	▶
	OTHER		S		
	OTHER		▼		

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL	
	Tennessee St			Tennessee St			I-10 EB Ramps			I-10 EB Ramps				
	LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT		WR
	X	2	0	1	2	X	0.5	1	0.5	X	X	X		
AM	7:00 AM	0	86	17	12	63	0	25	25	63	0	0	0	291
	7:15 AM	0	88	19	23	86	0	20	36	82	0	0	0	354
	7:30 AM	0	107	21	19	88	0	23	28	96	0	0	0	382
	7:45 AM	0	121	34	19	105	0	29	52	92	0	0	0	452
	8:00 AM	0	144	40	22	105	0	31	70	102	0	0	0	514
	8:15 AM	0	127	26	19	101	0	34	36	81	0	0	0	424
	8:30 AM	0	142	35	16	83	0	34	43	80	0	0	0	433
	8:45 AM	0	124	37	32	117	0	29	46	119	0	0	0	504
	VOLUMES	0	939	229	162	748	0	225	336	715	0	0	0	3,354
	APPROACH %	0%	80%	20%	18%	82%	0%	18%	26%	56%	0%	0%	0%	
APP/DEPART	1,168	/	1,164	910	/	1,463	1,276	/	727	0	/	0	0	
BEGIN PEAK HR	8:00 AM													
VOLUMES	0	537	138	89	406	0	128	195	382	0	0	0	1,875	
APPROACH %	0%	80%	20%	18%	82%	0%	18%	28%	54%	0%	0%	0%		
PEAK HR FACTOR	0.917													
APP/DEPART	675	/	665	495	/	788	705	/	422	0	/	0	0	
PM	4:00 PM	0	198	34	30	133	0	79	90	111	0	0	0	675
	4:15 PM	0	162	26	43	131	0	75	74	96	0	0	0	607
	4:30 PM	0	171	29	37	111	0	70	116	99	0	0	0	633
	4:45 PM	0	154	28	44	143	0	80	89	117	0	0	0	655
	5:00 PM	0	166	19	36	128	0	82	120	104	0	0	0	655
	5:15 PM	0	155	33	53	129	0	71	94	76	0	0	0	611
	5:30 PM	0	145	27	42	126	0	87	87	125	0	0	0	639
	5:45 PM	0	144	21	38	112	0	66	53	84	0	0	0	518
	VOLUMES	0	1,295	217	323	1,013	0	610	723	812	0	0	0	4,993
	APPROACH %	0%	86%	14%	24%	76%	0%	28%	34%	38%	0%	0%	0%	
APP/DEPART	1,512	/	1,905	1,336	/	1,825	2,145	/	1,263	0	/	0	0	
BEGIN PEAK HR	4:00 PM													
VOLUMES	0	685	117	154	518	0	304	369	423	0	0	0	2,570	
APPROACH %	0%	85%	15%	23%	77%	0%	28%	34%	39%	0%	0%	0%		
PEAK HR FACTOR	0.864													
APP/DEPART	802	/	989	672	/	941	1,096	/	640	0	/	0	0	

U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

0	0	0	0
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0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
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0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

0	0	0	0
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INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: 5/28/25 WEDNESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Redlands Tennessee St W Lugonia Ave	PROJECT #: SCS434 LOCATION #: 1 CONTROL: SIGNAL
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PCE Adjusted	NOTES:						AM PM MD OTHER OTHER	▲ N ◀ W S ▼	E ▶	
	Class	1	2	3	4	5				6
	Factor	1	1.5	2	3	2				2

LANES:	NORTHBOUND <small>Tennessee St</small>			SOUTHBOUND <small>Tennessee St</small>			EASTBOUND <small>W Lugonia Ave</small>			WESTBOUND <small>W Lugonia Ave</small>			TOTAL	U-TURNS				
	NL 1	NT 1	NR 1	SL 1	ST 1	SR 0	EL 1	ET 2	ER 1	WL 1	WT 0,5	WR 0,5		NB	SB	EB	WB	TTL

AM	7:00 AM	12	40	14	6	20	0	3	23	29	23	40	19	227						0
	7:15 AM	14	42	19	15	23	0	5	39	41	31	72	30	329						0
	7:30 AM	16	56	13	19	27	0	10	47	28	46	77	30	366						0
	7:45 AM	32	56	20	20	32	2	5	47	33	23	106	30	404						0
	8:00 AM	27	73	32	24	21	2	1	46	40	27	104	44	439						0
	8:15 AM	28	63	19	18	28	1	8	77	55	32	94	28	450						0
	8:30 AM	41	75	24	12	20	2	4	56	33	19	97	42	423						0
	8:45 AM	36	52	19	19	27	2	11	72	49	29	98	20	431						0
	VOLUMES	204	456	159	133	197	9	46	405	306	228	686	241	3,068	0	0	0	0	0	0
	APPROACH %	25%	56%	19%	39%	58%	3%	6%	54%	40%	20%	59%	21%							
	APP/DEPART	818	/	742	338	/	731	757	/	696	1,155	/	899	0						
	BEGIN PEAK HR	8:00 AM																		
VOLUMES	131	263	94	73	95	7	24	250	177	107	393	133	1,743							
APPROACH %	27%	54%	19%	42%	54%	4%	5%	56%	39%	17%	62%	21%								
PEAK HR FACTOR	0.875																			
APP/DEPART	487	/	419	175	/	378	450	/	416	632	/	530	0							
PM	4:00 PM	68	90	63	24	24	1	30	180	95	18	95	49	734						0
	4:15 PM	66	86	74	36	26	1	11	182	122	25	77	35	738						0
	4:30 PM	70	83	56	25	21	3	13	179	92	20	81	43	683						0
	4:45 PM	57	87	75	23	32	6	24	180	115	24	103	28	752						0
	5:00 PM	74	99	69	28	34	7	24	210	96	16	83	46	783						0
	5:15 PM	82	83	66	29	26	7	16	203	108	26	97	36	777						0
	5:30 PM	62	82	77	25	22	3	12	217	119	24	95	34	769						0
	5:45 PM	72	71	58	31	18	3	12	182	80	28	115	28	696						0
	VOLUMES	549	678	536	220	201	31	142	1,530	826	178	744	298	5,930	0	0	0	0	0	0
	APPROACH %	31%	38%	30%	49%	44%	7%	6%	61%	33%	15%	61%	24%							
	APP/DEPART	1,762	/	1,117	452	/	1,205	2,497	/	2,286	1,219	/	1,323	0						
	BEGIN PEAK HR	4:45 PM																		
VOLUMES	274	350	286	105	113	23	76	809	437	89	377	143	3,080							
APPROACH %	30%	38%	31%	43%	47%	10%	6%	61%	33%	15%	62%	24%								
PEAK HR FACTOR	0.943																			
APP/DEPART	910	/	569	241	/	639	1,322	/	1,199	609	/	674	0							



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: 5/28/25 WEDNESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Redlands New York St W Lugonia Ave	PROJECT #: LOCATION #: CONTROL:	SC5434 3 SIGNAL
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PCE Adjusted	NOTES:										AM PM MD OTHER OTHER	▲ N ▼	◀ W E ▶
	Class	1	2	3	4	5	6						
	Factor	1	1.5	2	3	2	2						

LANES:	NORTHBOUND <small>New York St</small>			SOUTHBOUND <small>New York St</small>			EASTBOUND <small>W Lugonia Ave</small>			WESTBOUND <small>W Lugonia Ave</small>			TOTAL	U-TURNS				
	NL 0.5	NT X	NR 0.5	SL X	ST X	SR X	EL X	ET 2	ER 1	WL 1	WT 1	WR X		NB	SB	EB	WB	TTL

AM	7:00 AM	8	0	1	0	0	0	0	47	14	4	78	0	150					0
	7:15 AM	16	0	1	0	0	0	0	55	20	8	121	0	220					0
	7:30 AM	14	0	0	0	0	0	0	51	15	15	157	0	250					0
	7:45 AM	22	0	7	0	0	0	0	82	22	15	148	0	295					0
	8:00 AM	29	0	8	0	0	0	0	86	25	13	159	0	319					0
	8:15 AM	17	0	6	0	0	0	0	103	21	7	141	0	294					0
	8:30 AM	23	0	4	0	0	0	0	77	16	12	132	0	264					0
	8:45 AM	21	0	13	0	0	0	0	87	39	12	126	0	297					0
	VOLUMES	148	0	39	0	0	0	0	586	171	85	1,061	0	2,089	0	0	0	0	0
	APPROACH %	79%	0%	21%	0%	0%	0%	0%	77%	23%	7%	93%	0%						
APP/DEPART	187	/	0	0	/	256	757	/	625	1,145	/	1,209	0						
BEGIN PEAK HR	7:45 AM																		
VOLUMES	91	0	24	0	0	0	0	347	84	47	580	0	1,172						
APPROACH %	79%	0%	21%	0%	0%	0%	0%	81%	19%	7%	93%	0%							
PEAK HR FACTOR	0.784																	0.911	0.918
APP/DEPART	115	/	0	0	/	131	431	/	371	627	/	671	0						
PM	4:00 PM	56	0	10	0	0	0	0	250	51	6	106	0	478					0
	4:15 PM	39	0	14	0	0	0	0	265	54	8	94	0	473					0
	4:30 PM	51	0	22	0	0	0	0	222	48	7	98	0	446					0
	4:45 PM	45	0	17	0	0	0	0	257	61	15	108	0	501					0
	5:00 PM	57	0	15	0	0	0	0	259	56	5	107	0	497					0
	5:15 PM	38	0	11	0	0	0	0	252	53	5	104	0	462					0
	5:30 PM	44	0	10	0	0	0	0	278	64	2	104	0	502					0
	5:45 PM	56	0	12	0	0	0	0	239	48	9	117	0	481					0
	VOLUMES	384	0	109	0	0	0	0	2,021	433	56	835	0	3,837	0	0	0	0	
	APPROACH %	78%	0%	22%	0%	0%	0%	0%	82%	18%	6%	94%	0%						
APP/DEPART	493	/	0	0	/	489	2,454	/	2,129	891	/	1,219	0						
BEGIN PEAK HR	4:45 PM																		
VOLUMES	183	0	52	0	0	0	0	1,045	233	27	421	0	1,960						
APPROACH %	78%	0%	22%	0%	0%	0%	0%	82%	18%	6%	94%	0%							
PEAK HR FACTOR	0.826																	0.914	0.977
APP/DEPART	235	/	0	0	/	260	1,278	/	1,097	448	/	604	0						



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: 5/28/25 WEDNESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Redlands Texas St W Lugonia Ave	PROJECT #: LOCATION #: CONTROL:	SC5434 4 SIGNAL
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PCE Adjusted	NOTES:										AM PM MD OTHER OTHER	▲ N ◀ W S ▼	E ▶
	Class	1	2	3	4	5	6						
	Factor	1	1.5	2	3	2	2						

LANES:	NORTHBOUND <small>Texas St</small>			SOUTHBOUND <small>Texas St</small>			EASTBOUND <small>W Lugonia Ave</small>			WESTBOUND <small>W Lugonia Ave</small>			TOTAL	U-TURNS				
	NL 0	NT 1	NR 1	SL 0	ST 1	SR 1	EL 1	ET 1.5	ER 0.5	WL 1	WT 2	WR 0		NB	SB	EB	WB	TTL

AM	7:00 AM	4	22	5	2	32	7	2	33	11	15	60	4	196						0
	7:15 AM	8	32	11	1	43	9	5	40	11	16	115	3	292						0
	7:30 AM	22	37	14	2	52	14	1	43	4	31	120	3	342						0
	7:45 AM	12	33	22	4	72	17	5	65	14	41	125	2	410						0
	8:00 AM	20	49	18	3	60	9	11	66	10	24	132	5	405						0
	8:15 AM	6	50	14	8	89	18	11	74	17	31	114	4	434						0
	8:30 AM	17	27	15	5	50	15	7	56	14	40	103	3	352						0
	8:45 AM	18	28	12	2	51	16	7	68	23	27	96	3	348						0
	VOLUMES	106	277	110	27	447	104	47	443	103	223	864	27	2,776	0	0	0	0	0	0
	APPROACH %	22%	56%	22%	5%	77%	18%	8%	75%	17%	20%	78%	2%							
APP/DEPART	493	/	350	578	/	773	592	/	580	1,114	/	1,074	0							
BEGIN PEAK HR	7:45 AM																			
VOLUMES	55	158	69	20	270	59	32	260	55	136	474	14	1,599							
APPROACH %	19%	56%	24%	6%	77%	17%	9%	75%	16%	22%	76%	2%								
PEAK HR FACTOR	0.812																			
APP/DEPART	281	/	204	349	/	460	347	/	349	623	/	587	0							
PM	4:00 PM	15	43	20	6	51	14	13	218	28	24	89	5	523						0
	4:15 PM	22	61	38	7	54	3	13	206	33	16	67	3	521						0
	4:30 PM	18	69	27	2	44	7	9	185	29	16	78	3	486						0
	4:45 PM	18	57	22	6	50	14	19	202	33	18	85	5	528						0
	5:00 PM	31	68	30	4	53	7	9	214	28	14	79	6	540						0
	5:15 PM	22	75	25	7	56	10	13	200	30	20	64	7	528						0
	5:30 PM	18	64	19	4	42	11	21	223	33	16	77	6	532						0
	5:45 PM	19	63	25	6	52	11	19	179	16	12	84	7	492						0
	VOLUMES	162	498	205	42	401	77	115	1,626	228	134	622	42	4,149	0	0	0	0	0	0
	APPROACH %	19%	58%	24%	8%	77%	15%	6%	83%	12%	17%	78%	5%							
APP/DEPART	864	/	654	520	/	763	1,969	/	1,873	798	/	860	0							
BEGIN PEAK HR	4:45 PM																			
VOLUMES	89	264	96	21	200	42	62	838	123	67	304	24	2,128							
APPROACH %	20%	59%	21%	8%	76%	16%	6%	82%	12%	17%	77%	6%								
PEAK HR FACTOR	0.874																			
APP/DEPART	448	/	349	263	/	390	1,023	/	955	395	/	434	0							



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: 5/28/25 WEDNESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Redlands Orange St W Lugonia Ave	PROJECT #: SC5434	LOCATION #: 5	CONTROL: SIGNAL
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PCE Adjusted	NOTES:						AM PM MD OTHER OTHER	▲ N ◀ W S ▼	E ▶	
	Class	1	2	3	4	5				6
	Factor	1	1.5	2	3	2				2

LANES:	NORTHBOUND <small>Orange St</small>			SOUTHBOUND <small>Orange St</small>			EASTBOUND <small>W Lugonia Ave</small>			WESTBOUND <small>W Lugonia Ave</small>			TOTAL	U-TURNS				
	NL 1	NT 1	NR 1	SL 1	ST 1	SR 1	EL 1	ET 2	ER 0	WL 1	WT 1	WR 1		NB	SB	EB	WB	TTL

AM	7:00 AM	11	35	21	10	48	7	5	33	10	47	79	14	318	0	0	0	0	0
	7:15 AM	8	38	4	7	55	12	11	26	8	43	114	26	350	0	0	0	0	0
	7:30 AM	9	54	33	15	81	18	10	32	17	51	128	45	490	0	0	0	0	0
	7:45 AM	8	59	12	22	70	15	12	53	16	26	128	37	456	0	0	0	0	0
	8:00 AM	8	57	12	26	77	10	10	61	4	41	139	35	478	0	0	0	0	0
	8:15 AM	12	51	20	19	81	10	13	78	14	33	140	48	517	0	0	0	0	0
	8:30 AM	9	45	16	23	113	16	11	38	10	42	111	29	461	0	0	0	0	0
	8:45 AM	11	42	12	21	84	10	7	52	13	25	103	21	399	0	0	0	0	0
	VOLUMES	76	381	128	142	607	97	77	371	91	307	941	254	3,469	0	0	0	0	0
	APPROACH %	13%	65%	22%	17%	72%	11%	14%	69%	17%	20%	63%	17%						
APP/DEPART	584	/	712	845	/	1,004	539	/	640	1,501	/	1,113	0						
BEGIN PEAK HR	7:30 AM																		
VOLUMES	37	221	76	81	308	52	44	223	51	151	535	164	1,941						
APPROACH %	11%	66%	23%	18%	70%	12%	14%	70%	16%	18%	63%	19%							
PEAK HR FACTOR	0.868																		
APP/DEPART	334	/	429	441	/	509	318	/	380	850	/	624	0						
PM	4:00 PM	9	95	21	19	99	12	11	148	40	23	61	5	541	0	0	0	0	0
	4:15 PM	13	63	14	20	85	9	9	176	47	18	73	13	538	0	0	0	0	0
	4:30 PM	18	78	28	30	96	10	17	180	26	21	70	16	588	0	0	0	0	0
	4:45 PM	11	74	20	28	94	14	14	156	36	23	96	19	583	0	0	0	0	0
	5:00 PM	16	83	18	32	62	10	13	182	36	19	75	18	563	0	0	0	0	0
	5:15 PM	14	100	29	24	71	20	7	178	32	20	60	18	572	0	0	0	0	0
	5:30 PM	19	89	31	28	86	13	14	178	31	17	67	18	589	0	0	0	0	0
	5:45 PM	21	57	12	24	73	15	10	154	25	20	75	22	507	0	0	0	0	0
	VOLUMES	121	638	171	204	665	103	95	1,349	272	160	576	128	4,479	0	0	0	0	0
	APPROACH %	13%	69%	18%	21%	68%	11%	6%	79%	16%	18%	67%	15%						
APP/DEPART	930	/	861	971	/	1,096	1,716	/	1,723	863	/	800	0						
BEGIN PEAK HR	4:45 PM																		
VOLUMES	60	345	97	111	313	57	48	693	135	79	298	72	2,306						
APPROACH %	12%	69%	19%	23%	65%	12%	5%	79%	15%	18%	66%	16%							
PEAK HR FACTOR	0.880																		
APP/DEPART	502	/	465	481	/	526	876	/	901	448	/	415	0						



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: 5/28/25 WEDNESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Redlands Texas St W San Bernardino Ave	PROJECT #: SC5434	LOCATION #: 6	CONTROL: SIGNAL
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PCE Adjusted	NOTES:						AM PM MD OTHER OTHER	▲ N ◀ W S ▼	E ▶	
	Class	1	2	3	4	5				6
	Factor	1	1.5	2	3	2				2

LANES:	NORTHBOUND <small>Texas St</small>			SOUTHBOUND <small>Texas St</small>			EASTBOUND <small>W San Bernardino Ave</small>			WESTBOUND <small>W San Bernardino Ave</small>			TOTAL	U-TURNS				
	NL 0	NT 1	NR 0	SL 1	ST 1	SR 1	EL 1	ET 1	ER 0	WL 1	WT 1	WR 1		NB	SB	EB	WB	TTL

AM	7:00 AM	17	11	5	10	23	28	27	44	6	2	155	4	331	0	0	0	0	0
	7:15 AM	22	25	2	9	20	24	17	59	8	12	141	11	349	0	0	0	0	0
	7:30 AM	14	24	7	15	37	36	26	96	6	9	163	29	460	0	0	0	0	0
	7:45 AM	12	33	4	13	45	38	13	85	9	20	168	24	462	0	0	0	0	0
	8:00 AM	9	49	11	10	33	39	48	85	5	7	149	56	497	0	0	0	0	0
	8:15 AM	11	57	7	31	71	43	37	81	6	15	108	90	554	0	0	0	0	0
	8:30 AM	16	24	5	40	49	35	10	85	10	10	133	34	448	0	0	0	0	0
	8:45 AM	13	16	8	13	23	20	16	89	11	13	117	17	354	0	0	0	0	0
	VOLUMES	112	238	48	141	299	262	193	622	60	87	1,132	263	3,454	0	0	0	0	0
	APPROACH %	28%	60%	12%	20%	43%	37%	22%	71%	7%	6%	76%	18%						
APP/DEPART	398	/	693	701	/	445	875	/	811	1,481	/	1,505	0						
BEGIN PEAK HR	7:30 AM																		
VOLUMES	45	162	29	69	185	155	124	347	25	51	587	198	1,973						
APPROACH %	19%	69%	12%	17%	45%	38%	25%	70%	5%	6%	70%	24%							
PEAK HR FACTOR		0.790			0.708			0.903			0.984		0.890						
APP/DEPART	236	/	483	408	/	260	495	/	444	835	/	787	0						
PM	4:00 PM	19	30	16	14	48	12	16	148	9	5	81	5	401	0	0	0	0	0
	4:15 PM	21	30	12	5	30	15	15	168	8	10	92	8	411	0	0	0	0	0
	4:30 PM	22	28	17	11	21	11	16	157	16	11	100	8	416	0	0	0	0	0
	4:45 PM	17	40	11	9	48	14	17	164	8	12	94	4	435	0	0	0	0	0
	5:00 PM	23	32	9	8	45	13	9	159	14	12	82	4	408	0	0	0	0	0
	5:15 PM	19	38	22	10	46	6	10	165	20	6	85	9	435	0	0	0	0	0
	5:30 PM	20	47	10	11	27	19	16	155	11	5	91	11	421	0	0	0	0	0
	5:45 PM	14	28	17	4	34	24	20	175	19	8	88	11	440	0	0	0	0	0
	VOLUMES	154	271	113	71	297	113	119	1,289	104	68	711	59	3,367	0	0	0	0	0
	APPROACH %	29%	50%	21%	15%	62%	23%	8%	85%	7%	8%	85%	7%						
APP/DEPART	538	/	449	480	/	468	1,512	/	1,473	837	/	977	0						
BEGIN PEAK HR	5:00 PM																		
VOLUMES	76	145	58	33	151	61	55	653	64	31	345	35	1,704						
APPROACH %	27%	52%	21%	13%	62%	25%	7%	85%	8%	7%	84%	8%							
PEAK HR FACTOR		0.880			0.940			0.903			0.958		0.968						
APP/DEPART	278	/	235	245	/	245	772	/	743	410	/	482	0						



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: 5/28/25 WEDNESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Redlands Tennessee St W San Bernardino Ave	PROJECT #: LOCATION #: CONTROL:	SC5434 7 SIGNAL
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PCE Adjusted	NOTES:						AM PM MD OTHER OTHER	▲ N ◀ W S ▼	E ▶	
	Class	1	2	3	4	5				6
	Factor	1	1.5	2	3	2				2

LANES:	NORTHBOUND <small>Tennessee St</small>			SOUTHBOUND <small>SR-210 NB Ramps</small>			EASTBOUND <small>W San Bernardino Ave</small>			WESTBOUND <small>W San Bernardino Ave</small>			TOTAL	U-TURNS				
	NL 1	NT 2	NR 0	SL 1	ST 0.5	SR 0.5	EL 2	ET 1	ER 1	WL 1	WT 1	WR 1		NB	SB	EB	WB	TTL

AM	7:00 AM	2	59	3	40	2	30	30	46	24	1	157	65	457						0
	7:15 AM	10	56	3	44	1	25	30	65	36	2	136	64	470						0
	7:30 AM	14	86	3	62	6	33	42	100	36	5	119	98	603						0
	7:45 AM	9	69	10	41	3	32	52	102	44	9	144	107	620						0
	8:00 AM	6	96	4	73	7	31	52	130	31	6	132	80	646						0
	8:15 AM	8	87	6	57	5	28	68	145	27	14	139	78	661						0
	8:30 AM	12	111	0	45	4	8	58	91	24	6	130	95	581						0
	8:45 AM	7	78	4	38	5	24	41	73	37	8	108	50	470						0
	VOLUMES	67	640	33	398	32	210	373	750	257	51	1,063	635	4,506						0
	APPROACH %	9%	87%	4%	62%	5%	33%	27%	54%	19%	3%	61%	36%							0
	APP/DEPART	739	/	1,647	640	/	340	1,379	/	1,180	1,749	/	1,340	0						0
	BEGIN PEAK HR	7:30 AM																		
VOLUMES	37	338	23	233	21	123	214	476	137	34	533	363	2,529						0	
APPROACH %	9%	85%	6%	62%	5%	33%	26%	58%	17%	4%	57%	39%							0	
PEAK HR FACTOR		0.935			0.855			0.863			0.895		0.957						0	
APP/DEPART	397	/	914	376	/	192	827	/	731	930	/	693	0						0	
PM	4:00 PM	8	120	10	69	8	35	153	127	35	6	69	59	696						0
	4:15 PM	15	123	11	74	5	26	155	147	48	4	79	58	744						0
	4:30 PM	7	137	6	66	1	29	148	163	50	11	78	56	748						0
	4:45 PM	6	130	6	71	4	24	124	150	49	10	78	56	707						0
	5:00 PM	11	128	6	76	6	24	165	152	40	11	88	43	748						0
	5:15 PM	6	121	8	60	13	33	165	162	49	5	85	52	758						0
	5:30 PM	7	107	11	64	3	30	146	153	45	5	81	56	706						0
	5:45 PM	6	119	8	91	10	32	132	160	38	7	88	50	739						0
	VOLUMES	66	983	66	569	49	231	1,186	1,213	353	59	645	427	5,843						0
	APPROACH %	6%	88%	6%	67%	6%	27%	43%	44%	13%	5%	57%	38%							0
	APP/DEPART	1,114	/	2,595	849	/	460	2,751	/	1,847	1,130	/	941	0						0
	BEGIN PEAK HR	4:30 PM																		
VOLUMES	30	514	26	272	24	109	601	627	188	37	329	206	2,960						0	
APPROACH %	5%	90%	5%	67%	6%	27%	42%	44%	13%	6%	58%	36%							0	
PEAK HR FACTOR		0.956			0.953			0.942			0.991		0.977						0	
APP/DEPART	570	/	1,321	404	/	248	1,415	/	924	571	/	468	0						0	



INTERSECTION TURNING MOVEMENT COUNTS

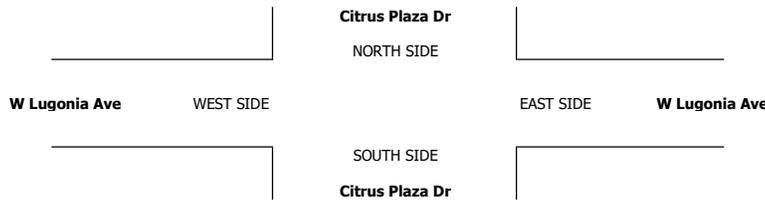
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: 5/28/25 WEDNESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Redlands Citrus Plaza Dr W Lugonia Ave	PROJECT #: LOCATION #: CONTROL:	SC5434 9 SIGNAL
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PCE Adjusted	NOTES:						AM PM MD OTHER OTHER	▲ N ▼	◀ W E ▶	
	Class	1	2	3	4	5				6
	Factor	1	1.5	2	3	2				2

LANES:	NORTHBOUND <small>Citrus Plaza Dr</small>			SOUTHBOUND <small>Citrus Plaza Dr</small>			EASTBOUND <small>W Lugonia Ave</small>			WESTBOUND <small>W Lugonia Ave</small>			TOTAL	U-TURNS				
	NL 1	NT 0.5	NR 0.5	SL 1.5	ST 0.5	SR 1	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0		NB	SB	EB	WB	TTL

AM													0		
	7:00 AM	0	0	0	33	0	25	0	22	2	0	39		13	133
7:15 AM	0	0	0	46	0	27	1	39	0	0	76	9	197	0	
7:30 AM	0	0	0	48	0	21	6	36	0	0	79	14	204	0	
7:45 AM	0	0	0	52	1	34	2	32	0	1	113	21	256	0	
8:00 AM	2	0	0	60	1	19	4	33	0	3	112	18	251	0	
8:15 AM	0	0	0	80	0	14	5	60	0	6	102	15	281	0	
8:30 AM	0	0	0	41	3	16	5	50	0	1	111	26	253	0	
8:45 AM	0	0	0	70	0	32	5	62	0	0	96	40	304	0	
VOLUMES	2	0	0	428	5	188	27	333	2	11	728	154	1,877	0	
APPROACH %	100%	0%	0%	69%	1%	30%	7%	92%	1%	1%	82%	17%		0	
APP/DEPART	2	/	181	621	/	18	362	/	761	893	/	917	0	0	
BEGIN PEAK HR	8:00 AM													0	
VOLUMES	2	0	0	250	4	81	18	205	0	10	421	98	1,088	0	
APPROACH %	100%	0%	0%	75%	1%	24%	8%	92%	0%	2%	80%	19%		0	
PEAK HR FACTOR	0.250			0.821			0.843			0.957			0.896	0	
APP/DEPART	2	/	116	335	/	14	223	/	455	529	/	504	0	0	
PM	4:00 PM	2	3	5	145	2	46	22	155	1	12	104	47	544	0
	4:15 PM	4	2	9	149	5	23	16	157	0	9	87	48	508	0
	4:30 PM	3	2	10	139	6	49	28	135	1	10	90	53	525	0
	4:45 PM	1	2	11	154	2	48	18	154	1	8	102	57	556	0
	5:00 PM	2	2	15	128	3	32	30	186	0	7	99	57	561	0
	5:15 PM	2	1	12	133	4	45	21	182	0	9	99	73	580	0
	5:30 PM	7	1	10	157	5	42	13	181	0	9	96	55	575	0
	5:45 PM	4	3	9	137	6	33	13	129	0	8	117	65	523	0
	VOLUMES	25	16	81	1,140	33	317	160	1,277	3	72	793	453	4,370	0
	APPROACH %	20%	13%	66%	77%	2%	21%	11%	89%	0%	5%	60%	34%		0
	APP/DEPART	122	/	629	1,490	/	108	1,440	/	2,498	1,318	/	1,135	0	0
	BEGIN PEAK HR	4:45 PM													0
VOLUMES	12	6	48	572	14	167	81	702	1	33	396	241	2,271	0	
APPROACH %	18%	9%	73%	76%	2%	22%	10%	90%	0%	5%	59%	36%		0	
PEAK HR FACTOR	0.868			0.922			0.910			0.927			0.980	0	
APP/DEPART	66	/	328	752	/	48	784	/	1,322	669	/	574	0	0	



Appendix C: Synchro Analysis



HCM 7th Signalized Intersection Summary

1: Tennessee St & W Lugonia Ave

10/15/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	230	167	99	376	122	129	238	83	66	92	7
Future Volume (veh/h)	23	230	167	99	376	122	129	238	83	66	92	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	24	237	172	102	388	126	133	245	86	68	95	7
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	49	732	327	130	471	399	157	648	549	103	592	502
Arrive On Green	0.03	0.21	0.21	0.07	0.25	0.25	0.09	0.35	0.35	0.06	0.32	0.32
Sat Flow, veh/h	1781	3554	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	24	237	172	102	388	126	133	245	86	68	95	7
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.8	3.2	5.5	3.2	11.1	3.7	4.2	5.6	2.1	2.1	2.1	0.2
Cycle Q Clear(g_c), s	0.8	3.2	5.5	3.2	11.1	3.7	4.2	5.6	2.1	2.1	2.1	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	49	732	327	130	471	399	157	648	549	103	592	502
V/C Ratio(X)	0.49	0.32	0.53	0.78	0.82	0.32	0.85	0.38	0.16	0.66	0.16	0.01
Avail Cap(c_a), veh/h	157	1124	502	157	592	502	157	648	549	157	592	502
HCM 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
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.3	19.2	20.1	25.9	20.1	17.3	25.6	14.0	12.8	26.2	14.0	13.4
Incr Delay (d2), s/veh	7.2	0.3	1.3	18.9	7.6	0.4	33.3	1.7	0.6	7.0	0.6	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	1.2	1.9	1.9	5.1	1.2	3.1	2.4	0.7	1.0	0.9	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	34.5	19.5	21.4	44.8	27.7	17.8	58.8	15.7	13.5	33.2	14.6	13.4
LnGrp LOS	C	B	C	D	C	B	E	B	B	C	B	B
Approach Vol, veh/h	433			616			464			170		
Approach Delay, s/veh	21.1			28.5			27.6			22.0		
Approach LOS	C			C			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.8	24.2	8.7	16.2	9.5	22.5	6.1	18.8				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	18.0	5.0	18.0	5.0	18.0	5.0	18.0				
Max Q Clear Time (g_c+I1), s	4.1	7.6	5.2	7.5	6.2	4.1	2.8	13.1				
Green Ext Time (p_c), s	0.0	1.2	0.0	1.4	0.0	0.3	0.0	1.2				
Intersection Summary												
HCM 7th Control Delay, s/veh				25.7								
HCM 7th LOS				C								

HCM 7th Signalized Intersection Summary
 2: HD Parking Lot & W Lugonia Ave

10/15/2025



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	280	82	27	533	77	53
Future Volume (veh/h)	280	82	27	533	77	53
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	295	86	28	561	81	56
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	767	342	59	664	423	292
Arrive On Green	0.22	0.22	0.03	0.36	0.43	0.43
Sat Flow, veh/h	3618	1572	1767	1856	988	683
Grp Volume(v), veh/h	295	86	28	561	138	0
Grp Sat Flow(s),veh/h/ln	1763	1572	1767	1856	1683	0
Q Serve(g_s), s	3.0	1.9	0.7	11.7	2.1	0.0
Cycle Q Clear(g_c), s	3.0	1.9	0.7	11.7	2.1	0.0
Prop In Lane		1.00	1.00		0.59	0.41
Lane Grp Cap(c), veh/h	767	342	59	664	721	0
V/C Ratio(X)	0.38	0.25	0.48	0.85	0.19	0.00
Avail Cap(c_a), veh/h	1509	673	210	794	721	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	14.0	13.6	20.0	12.4	7.5	0.0
Incr Delay (d2), s/veh	0.3	0.4	5.9	7.2	0.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.6	0.3	4.7	0.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	14.4	14.0	25.9	19.7	8.1	0.0
LnGrp LOS	B	B	C	B	A	
Approach Vol, veh/h	381			589	138	
Approach Delay, s/veh	14.3			20.0	8.1	
Approach LOS	B			B	A	
Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		22.5	5.9	13.6		19.5
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s		18.0	5.0	18.0		18.0
Max Q Clear Time (g_c+I1), s		4.1	2.7	5.0		13.7
Green Ext Time (p_c), s		0.3	0.0	1.6		1.3
Intersection Summary						
HCM 7th Control Delay, s/veh			16.5			
HCM 7th LOS			B			

HCM 7th Signalized Intersection Summary

3: New York St & W Lugonia Ave

10/15/2025



Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations		↔↑	↔↑	↔↑	↑	↔↑	↔↑
Traffic Volume (veh/h)	1	307	83	45	548	89	23
Future Volume (veh/h)	1	307	83	45	548	89	23
Initial Q (Qb), veh		0	0	0	0	0	0
Lane Width Adj.		1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)			1.00	1.00		1.00	1.00
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No	No	
Adj Sat Flow, veh/h/ln		1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h		337	91	49	602	98	25
Peak Hour Factor		0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %		3	3	3	3	3	3
Cap, veh/h		1529	682	213	1230	164	42
Arrive On Green		0.43	0.43	0.12	0.66	0.12	0.12
Sat Flow, veh/h		3618	1572	1767	1856	1363	348
Grp Volume(v), veh/h		337	91	49	602	124	0
Grp Sat Flow(s),veh/h/ln		1763	1572	1767	1856	1725	0
Q Serve(g_s), s		2.5	1.4	1.0	6.7	2.8	0.0
Cycle Q Clear(g_c), s		2.5	1.4	1.0	6.7	2.8	0.0
Prop In Lane			1.00	1.00		0.79	0.20
Lane Grp Cap(c), veh/h		1529	682	213	1230	208	0
V/C Ratio(X)		0.22	0.13	0.23	0.49	0.60	0.00
Avail Cap(c_a), veh/h		1529	682	213	1230	208	0
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh		7.4	7.1	16.5	3.5	17.3	0.0
Incr Delay (d2), s/veh		0.3	0.4	2.5	1.4	12.0	0.0
Initial Q Delay(d3), s/veh		0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		0.7	0.4	0.5	0.9	1.7	0.0
Unsig. Movement Delay, s/veh							
LnGrp Delay(d), s/veh		7.7	7.5	19.0	4.9	29.3	0.0
LnGrp LOS		A	A	B	A	C	
Approach Vol, veh/h		428			651	124	
Approach Delay, s/veh		7.6			6.0	29.3	
Approach LOS		A			A	C	
Timer - Assigned Phs		2	3	4			8
Phs Duration (G+Y+Rc), s		9.5	9.5	22.5			32.0
Change Period (Y+Rc), s		4.5	4.5	4.5			4.5
Max Green Setting (Gmax), s		5.0	5.0	18.0			18.0
Max Q Clear Time (g_c+I1), s		4.8	3.0	4.5			8.7
Green Ext Time (p_c), s		0.0	0.0	1.9			2.5
Intersection Summary							
HCM 7th Control Delay, s/veh			9.0				
HCM 7th LOS			A				
Notes							
User approved ignoring U-Turning movement.							

HCM 7th Signalized Intersection Summary

4: Texas St & W Lugonia Ave

10/15/2025

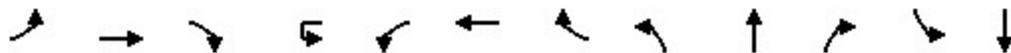


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	231	52	131	447	13	50	148	64	20	264	57
Future Volume (veh/h)	27	231	52	131	447	13	50	148	64	20	264	57
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	29	248	56	141	481	14	54	159	69	22	284	61
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	60	452	100	179	787	23	221	578	666	112	751	666
Arrive On Green	0.03	0.16	0.16	0.10	0.22	0.22	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	1767	2868	636	1767	3498	102	272	1364	1572	51	1773	1572
Grp Volume(v), veh/h	29	151	153	141	242	253	213	0	69	306	0	61
Grp Sat Flow(s),veh/h/ln	1767	1763	1741	1767	1763	1837	1636	0	1572	1824	0	1572
Q Serve(g_s), s	0.7	3.3	3.5	3.3	5.2	5.3	0.0	0.0	1.1	0.0	0.0	1.0
Cycle Q Clear(g_c), s	0.7	3.3	3.5	3.3	5.2	5.3	3.2	0.0	1.1	4.8	0.0	1.0
Prop In Lane	1.00		0.37	1.00		0.06	0.25		1.00	0.07		1.00
Lane Grp Cap(c), veh/h	60	278	275	179	397	413	799	0	666	863	0	666
V/C Ratio(X)	0.48	0.54	0.56	0.79	0.61	0.61	0.27	0.00	0.10	0.35	0.00	0.09
Avail Cap(c_a), veh/h	208	746	737	208	746	778	799	0	666	863	0	666
HCM 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
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.2	16.5	16.5	18.7	14.8	14.8	8.0	0.0	7.4	8.5	0.0	7.4
Incr Delay (d2), s/veh	5.8	1.6	1.8	15.8	1.5	1.5	0.8	0.0	0.3	1.1	0.0	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.2	1.2	1.9	1.8	1.9	1.1	0.0	0.3	1.7	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	26.0	18.1	18.3	34.5	16.3	16.3	8.8	0.0	7.7	9.6	0.0	7.6
LnGrp LOS	C	B	B	C	B	B	A		A	A		A
Approach Vol, veh/h		333			636			282				367
Approach Delay, s/veh		18.9			20.3			8.5				9.3
Approach LOS		B			C			A				A
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.5	8.8	11.2		22.5	5.9	14.1				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		18.0	5.0	18.0		18.0	5.0	18.0				
Max Q Clear Time (g_c+I1), s		5.2	5.3	5.5		6.8	2.7	7.3				
Green Ext Time (p_c), s		1.2	0.0	1.3		1.5	0.0	2.0				
Intersection Summary												
HCM 7th Control Delay, s/veh			15.5									
HCM 7th LOS			B									

HCM 7th Signalized Intersection Summary

5: Orange St & E Lugonia Ave

10/15/2025



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	40	196	47	1	137	517	156	33	211	57	75	298
Future Volume (veh/h)	40	196	47	1	137	517	156	33	211	57	75	298
Initial Q (Qb), veh	0	0	0		0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00		1.00		1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841		1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	42	204	49		143	539	162	34	220	59	78	310
Peak Hour Factor	0.96	0.96	0.96		0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4		4	4	4	4	4	4	4	4
Cap, veh/h	73	725	170		146	551	467	63	551	467	106	596
Arrive On Green	0.04	0.26	0.26		0.08	0.30	0.30	0.04	0.30	0.30	0.06	0.32
Sat Flow, veh/h	1753	2810	660		1753	1841	1560	1753	1841	1560	1753	1841
Grp Volume(v), veh/h	42	125	128		143	539	162	34	220	59	78	310
Grp Sat Flow(s),veh/h/ln	1753	1749	1722		1753	1841	1560	1753	1841	1560	1753	1841
Q Serve(g_s), s	1.4	3.4	3.6		4.9	17.5	4.9	1.1	5.7	1.7	2.6	8.2
Cycle Q Clear(g_c), s	1.4	3.4	3.6		4.9	17.5	4.9	1.1	5.7	1.7	2.6	8.2
Prop In Lane	1.00		0.38		1.00		1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	73	451	444		146	551	467	63	551	467	106	596
V/C Ratio(X)	0.57	0.28	0.29		0.98	0.98	0.35	0.54	0.40	0.13	0.73	0.52
Avail Cap(c_a), veh/h	146	523	515		146	551	467	146	551	467	146	596
HCM Platoon Ratio	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.3	17.8	17.9		27.5	20.9	16.5	28.5	16.8	15.4	27.8	16.5
Incr Delay (d2), s/veh	6.8	0.3	0.4		68.8	32.8	0.4	6.9	2.2	0.6	11.6	3.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	1.3	1.3		4.6	11.4	1.6	0.6	2.5	0.6	1.4	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.1	18.2	18.2		96.3	53.7	16.9	35.5	18.9	15.9	39.4	19.8
LnGrp LOS	D	B	B		F	D	B	D	B	B	D	B
Approach Vol, veh/h		295				844			313			436
Approach Delay, s/veh		20.6				53.9			20.2			22.7
Approach LOS		C				D			C			C
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.1	22.5	9.5	20.0	6.7	24.0	7.0	22.5				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	18.0	5.0	18.0	5.0	18.0	5.0	18.0				
Max Q Clear Time (g_c+I1), s	4.6	7.7	6.9	5.6	3.1	10.2	3.4	19.5				
Green Ext Time (p_c), s	0.0	1.0	0.0	1.0	0.0	1.2	0.0	0.0				

Intersection Summary												
HCM 7th Control Delay, s/veh			35.9									
HCM 7th LOS			D									

Notes
User approved ignoring U-Turning movement.

HCM 7th Signalized Intersection Summary
 5: Orange St & E Lugonia Ave

10/15/2025



Movement	SBR
Lane Configurations	7
Traffic Volume (veh/h)	46
Future Volume (veh/h)	46
Initial Q (Qb), veh	0
Lane Width Adj.	1.00
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1841
Adj Flow Rate, veh/h	48
Peak Hour Factor	0.96
Percent Heavy Veh, %	4
Cap, veh/h	505
Arrive On Green	0.32
Sat Flow, veh/h	1560
Grp Volume(v), veh/h	48
Grp Sat Flow(s),veh/h/ln	1560
Q Serve(g_s), s	1.3
Cycle Q Clear(g_c), s	1.3
Prop In Lane	1.00
Lane Grp Cap(c), veh/h	505
V/C Ratio(X)	0.10
Avail Cap(c_a), veh/h	505
HCM Platoon Ratio	1.00
Upstream Filter(l)	1.00
Uniform Delay (d), s/veh	14.2
Incr Delay (d2), s/veh	0.4
Initial Q Delay(d3), s/veh	0.0
%ile BackOfQ(50%),veh/ln	0.4
Unsig. Movement Delay, s/veh	
LnGrp Delay(d), s/veh	14.6
LnGrp LOS	B
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

HCM 7th Signalized Intersection Summary

6: Texas St & San Bernardino Ave

10/15/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	111	308	23	49	546	184	42	158	26	60	179	151
Future Volume (veh/h)	111	308	23	49	546	184	42	158	26	60	179	151
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	125	346	26	55	613	207	47	178	29	67	201	170
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	159	629	47	92	614	520	137	431	63	522	614	662
Arrive On Green	0.09	0.37	0.37	0.05	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1767	1704	128	1767	1856	1572	178	1301	191	1166	1856	1572
Grp Volume(v), veh/h	125	0	372	55	613	207	254	0	0	67	201	170
Grp Sat Flow(s),veh/h/ln	1767	0	1832	1767	1856	1572	1670	0	0	1166	1856	1572
Q Serve(g_s), s	3.8	0.0	8.7	1.7	18.0	5.5	0.0	0.0	0.0	0.0	4.4	3.8
Cycle Q Clear(g_c), s	3.8	0.0	8.7	1.7	18.0	5.5	5.9	0.0	0.0	2.1	4.4	3.8
Prop In Lane	1.00		0.07	1.00		1.00	0.19		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	159	0	676	92	614	520	631	0	0	522	614	662
V/C Ratio(X)	0.79	0.00	0.55	0.60	1.00	0.40	0.40	0.00	0.00	0.13	0.33	0.26
Avail Cap(c_a), veh/h	162	0	676	162	614	520	631	0	0	522	614	662
HCM 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
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.2	0.0	13.6	25.2	18.2	14.0	14.2	0.0	0.0	12.9	13.7	10.2
Incr Delay (d2), s/veh	21.7	0.0	1.0	6.2	35.9	0.5	1.9	0.0	0.0	0.5	1.4	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	3.3	0.8	12.7	1.8	2.5	0.0	0.0	0.6	1.9	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	45.9	0.0	14.5	31.4	54.1	14.5	16.1	0.0	0.0	13.4	15.1	11.2
LnGrp LOS	D		B	C	D	B	B			B	B	B
Approach Vol, veh/h		497			875			254			438	
Approach Delay, s/veh		22.4			43.3			16.1			13.3	
Approach LOS		C			D			B			B	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.5	7.3	24.6		22.5	9.4	22.5				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		18.0	5.0	18.0		18.0	5.0	18.0				
Max Q Clear Time (g_c+I1), s		7.9	3.7	10.7		6.4	5.8	20.0				
Green Ext Time (p_c), s		1.1	0.0	1.3		1.6	0.0	0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh			28.5									
HCM 7th LOS			C									

HCM 7th Signalized Intersection Summary

7: Tennessee St & San Bernardino Ave

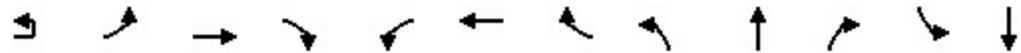
10/15/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑	↗	↖	↑	↗	↖	↑↔		↖	↗	
Traffic Volume (veh/h)	189	445	132	34	503	345	33	306	21	207	18	117
Future Volume (veh/h)	189	445	132	34	503	345	33	306	21	207	18	117
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	197	464	138	35	524	359	34	319	22	216	19	122
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	268	600	508	64	522	442	63	941	65	138	70	450
Arrive On Green	0.08	0.32	0.32	0.04	0.28	0.28	0.04	0.28	0.28	0.08	0.32	0.32
Sat Flow, veh/h	3428	1856	1572	1767	1856	1572	1767	3347	230	1767	216	1389
Grp Volume(v), veh/h	197	464	138	35	524	359	34	167	174	216	0	141
Grp Sat Flow(s),veh/h/ln	1714	1856	1572	1767	1856	1572	1767	1763	1814	1767	0	1605
Q Serve(g_s), s	3.6	14.4	4.2	1.2	18.0	13.6	1.2	4.8	4.9	5.0	0.0	4.2
Cycle Q Clear(g_c), s	3.6	14.4	4.2	1.2	18.0	13.6	1.2	4.8	4.9	5.0	0.0	4.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.13	1.00		0.87
Lane Grp Cap(c), veh/h	268	600	508	64	522	442	63	496	510	138	0	520
V/C Ratio(X)	0.74	0.77	0.27	0.55	1.00	0.81	0.54	0.34	0.34	1.56	0.00	0.27
Avail Cap(c_a), veh/h	268	600	508	138	522	442	138	496	510	138	0	520
HCM 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
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.9	19.5	16.1	30.3	23.0	21.4	30.4	18.3	18.3	29.5	0.0	16.0
Incr Delay (d2), s/veh	10.1	6.2	0.3	7.1	40.4	11.0	7.1	1.8	1.8	286.1	0.0	1.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	6.7	1.4	0.6	13.0	5.9	0.6	2.1	2.2	13.0	0.0	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	38.9	25.8	16.4	37.4	63.4	32.4	37.5	20.1	20.1	315.6	0.0	17.3
LnGrp LOS	D	C	B	D	F	C	D	C	C	F		B
Approach Vol, veh/h		799			918			375				357
Approach Delay, s/veh		27.4			50.3			21.7				197.8
Approach LOS		C			D			C				F
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.5	22.5	6.8	25.2	6.8	25.2	9.5	22.5				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	18.0	5.0	18.0	5.0	18.0	5.0	18.0				
Max Q Clear Time (g_c+I1), s	7.0	6.9	3.2	16.4	3.2	6.2	5.6	20.0				
Green Ext Time (p_c), s	0.0	1.4	0.0	0.6	0.0	0.5	0.0	0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh											59.9	
HCM 7th LOS											E	

HCM 7th Signalized Intersection Summary
 8: Citrus Plaza Dr & San Bernardino Ave

10/15/2025



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations		↔	↕↕	↗	↖	↕	↗	↖	↕	↗	↖	↕↕
Traffic Volume (veh/h)	1	60	328	26	51	303	296	8	5	37	403	328
Future Volume (veh/h)	1	60	328	26	51	303	296	8	5	37	403	328
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No			No			No			No
Adj Sat Flow, veh/h/ln		1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h		67	369	29	57	340	333	9	6	42	453	369
Peak Hour Factor		0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %		3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h		99	919	410	91	474	402	21	561	556	148	660
Arrive On Green		0.06	0.26	0.26	0.05	0.26	0.26	0.01	0.30	0.30	0.08	0.37
Sat Flow, veh/h		1767	3526	1572	1767	1856	1572	1767	1856	1572	1767	1763
Grp Volume(v), veh/h		67	369	29	57	340	333	9	6	42	453	369
Grp Sat Flow(s),veh/h/ln		1767	1763	1572	1767	1856	1572	1767	1856	1572	1767	1763
Q Serve(g_s), s		2.2	5.1	0.8	1.9	9.9	11.9	0.3	0.1	1.1	5.0	9.9
Cycle Q Clear(g_c), s		2.2	5.1	0.8	1.9	9.9	11.9	0.3	0.1	1.1	5.0	9.9
Prop In Lane		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h		99	919	410	91	474	402	21	561	556	148	660
V/C Ratio(X)		0.67	0.40	0.07	0.63	0.72	0.83	0.44	0.01	0.08	3.05	0.56
Avail Cap(c_a), veh/h		148	1065	475	148	561	475	148	561	556	148	660
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh		27.6	18.2	16.6	27.7	20.2	20.9	29.3	14.6	12.8	27.3	14.7
Incr Delay (d2), s/veh		7.7	0.3	0.1	7.0	3.6	10.1	14.0	0.0	0.3	942.4	3.4
Initial Q Delay(d3), s/veh		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.1	2.0	0.3	0.9	4.4	5.1	0.2	0.1	0.4	40.8	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh		35.3	18.5	16.7	34.7	23.8	31.1	43.3	14.6	13.1	969.7	18.1
LnGrp LOS		D	B	B	C	C	C	D	B	B	F	B
Approach Vol, veh/h			465			730			57			1307
Approach Delay, s/veh			20.8			28.0			18.0			352.1
Approach LOS			C			C			B			F
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.5	22.5	7.6	20.0	5.2	26.8	7.9	19.7				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	18.0	5.0	18.0	5.0	18.0	5.0	18.0				
Max Q Clear Time (g_c+I1), s	7.0	3.1	3.9	7.1	2.3	18.6	4.2	13.9				
Green Ext Time (p_c), s	0.0	0.1	0.0	1.8	0.0	0.0	0.0	1.3				

Intersection Summary												
HCM 7th Control Delay, s/veh			192.0									
HCM 7th LOS			F									

Notes
 User approved ignoring U-Turning movement.

HCM 7th Signalized Intersection Summary
 8: Citrus Plaza Dr & San Bernardino Ave

10/15/2025

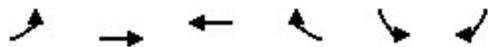


Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	432
Future Volume (veh/h)	432
Initial Q (Qb), veh	0
Lane Width Adj.	1.00
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1856
Adj Flow Rate, veh/h	485
Peak Hour Factor	0.89
Percent Heavy Veh, %	3
Cap, veh/h	589
Arrive On Green	0.37
Sat Flow, veh/h	1572
Grp Volume(v), veh/h	485
Grp Sat Flow(s),veh/h/ln	1572
Q Serve(g_s), s	16.6
Cycle Q Clear(g_c), s	16.6
Prop In Lane	1.00
Lane Grp Cap(c), veh/h	589
V/C Ratio(X)	0.82
Avail Cap(c_a), veh/h	589
HCM Platoon Ratio	1.00
Upstream Filter(l)	1.00
Uniform Delay (d), s/veh	16.9
Incr Delay (d2), s/veh	12.4
Initial Q Delay(d3), s/veh	0.0
%ile BackOfQ(50%),veh/ln	7.2
Unsig. Movement Delay, s/veh	
LnGrp Delay(d), s/veh	29.2
LnGrp LOS	C
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

HCM 7th Signalized Intersection Summary

9: W Lugonia Ave & Citrus Plaza Dr

10/15/2025



Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations							
Traffic Volume (veh/h)	15	192	408	93	233	81	
Future Volume (veh/h)	15	192	408	93	233	81	
Initial Q (Qb), veh	0	0	0	0	0	0	
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	
Work Zone On Approach		No	No		No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	
Adj Flow Rate, veh/h	17	213	453	103	259	90	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	
Percent Heavy Veh, %	2	2	2	2	2	2	
Cap, veh/h	40	1744	865	195	598	274	
Arrive On Green	0.02	0.49	0.30	0.30	0.17	0.17	
Sat Flow, veh/h	1781	3647	2973	650	3456	1585	
Grp Volume(v), veh/h	17	213	278	278	259	90	
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1753	1728	1585	
Q Serve(g_s), s	0.3	0.9	3.5	3.5	1.8	1.3	
Cycle Q Clear(g_c), s	0.3	0.9	3.5	3.5	1.8	1.3	
Prop In Lane	1.00			0.37	1.00	1.00	
Lane Grp Cap(c), veh/h	40	1744	534	526	598	274	
V/C Ratio(X)	0.43	0.12	0.52	0.53	0.43	0.33	
Avail Cap(c_a), veh/h	333	2391	1196	1180	2325	1066	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	
Uniform Delay (d), s/veh	12.9	3.7	7.8	7.8	9.9	9.7	
Incr Delay (d2), s/veh	7.2	0.0	0.8	0.8	0.5	0.7	
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/ln	0.1	0.1	0.7	0.7	0.5	1.3	
Unsig. Movement Delay, s/veh							
LnGrp Delay(d), s/veh	20.1	3.7	8.6	8.6	10.4	10.4	
LnGrp LOS	C	A	A	A	B	B	
Approach Vol, veh/h		230	556		349		
Approach Delay, s/veh		4.9	8.6		10.4		
Approach LOS		A	A		B		
Timer - Assigned Phs				4	6	7	8
Phs Duration (G+Y+Rc), s				17.6	9.1	5.1	12.5
Change Period (Y+Rc), s				4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s				18.0	18.0	5.0	18.0
Max Q Clear Time (g_c+I1), s				2.9	3.8	2.3	5.5
Green Ext Time (p_c), s				1.0	1.0	0.0	2.5
Intersection Summary							
HCM 7th Control Delay, s/veh			8.4				
HCM 7th LOS			A				

HCM 7th Signalized Intersection Summary

10: Tennessee St & I-10 WB Ramps

10/15/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					←↑↑		↑	↑↑			↑↑	
Traffic Volume (veh/h)	0	0	0	163	3	114	224	440	0	0	327	96
Future Volume (veh/h)	0	0	0	163	3	114	224	440	0	0	327	96
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No			No		
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				170	3	119	233	458	0	0	341	100
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				286	6	249	205	2248	0	0	1126	325
Arrive On Green				0.16	0.16	0.16	0.12	0.63	0.00	0.00	0.41	0.41
Sat Flow, veh/h				1781	39	1552	1781	3647	0	0	2813	786
Grp Volume(v), veh/h				170	0	122	233	458	0	0	221	220
Grp Sat Flow(s),veh/h/ln				1781	0	1591	1781	1777	0	0	1777	1729
Q Serve(g_s), s				3.9	0.0	3.0	5.0	2.4	0.0	0.0	3.6	3.7
Cycle Q Clear(g_c), s				3.9	0.0	3.0	5.0	2.4	0.0	0.0	3.6	3.7
Prop In Lane				1.00		0.98	1.00		0.00	0.00		0.45
Lane Grp Cap(c), veh/h				286	0	255	205	2248	0	0	736	716
V/C Ratio(X)				0.59	0.00	0.48	1.14	0.20	0.00	0.00	0.30	0.31
Avail Cap(c_a), veh/h				738	0	659	205	2248	0	0	736	716
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				16.9	0.0	16.6	19.2	3.4	0.0	0.0	8.5	8.6
Incr Delay (d2), s/veh				2.0	0.0	1.4	104.7	0.2	0.0	0.0	1.0	1.1
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.5	0.0	1.1	7.8	0.5	0.0	0.0	1.3	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				18.9	0.0	18.0	124.0	3.6	0.0	0.0	9.6	9.7
LnGrp LOS				B		B	F	A			A	A
Approach Vol, veh/h					292			691			441	
Approach Delay, s/veh					18.5			44.2			9.6	
Approach LOS					B			D			A	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		32.0			9.5	22.5		11.5				
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5				
Max Green Setting (Gmax), s		18.0			5.0	18.0		18.0				
Max Q Clear Time (g_c+I1), s		4.4			7.0	5.7		5.9				
Green Ext Time (p_c), s		2.5			0.0	2.1		1.3				
Intersection Summary												
HCM 7th Control Delay, s/veh					28.2							
HCM 7th LOS					C							

HCM 7th Signalized Intersection Summary

11: Tennessee St & I-10 EB Ramps

10/15/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔						↑	↗	↘	↕	
Traffic Volume (veh/h)	128	195	382	0	0	0	0	537	138	89	406	0
Future Volume (veh/h)	128	195	382	0	0	0	0	537	138	89	406	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1856	1841	1870				0	1885	1856	1870	1885	0
Adj Flow Rate, veh/h	141	214	420				0	590	152	98	446	0
Peak Hour Factor	0.91	0.91	0.91				0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	4	2				0	1	3	2	1	0
Cap, veh/h	228	346	496				0	656	547	130	1820	0
Arrive On Green	0.32	0.32	0.32				0.00	0.35	0.35	0.07	0.51	0.00
Sat Flow, veh/h	717	1088	1560				0	1885	1572	1781	3676	0
Grp Volume(v), veh/h	355	0	420				0	590	152	98	446	0
Grp Sat Flow(s),veh/h/ln	1805	0	1560				0	1885	1572	1781	1791	0
Q Serve(g_s), s	8.6	0.0	13.0				0.0	15.4	3.6	2.8	3.6	0.0
Cycle Q Clear(g_c), s	8.6	0.0	13.0				0.0	15.4	3.6	2.8	3.6	0.0
Prop In Lane	0.40		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	574	0	496				0	656	547	130	1820	0
V/C Ratio(X)	0.62	0.00	0.85				0.00	0.90	0.28	0.75	0.25	0.00
Avail Cap(c_a), veh/h	628	0	543				0	656	547	172	1820	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	15.0	0.0	16.5				0.0	16.0	12.2	23.5	7.1	0.0
Incr Delay (d2), s/veh	1.6	0.0	11.1				0.0	17.6	1.3	12.3	0.3	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	0.0	5.5				0.0	8.8	1.3	1.5	1.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.6	0.0	27.6				0.0	33.6	13.4	35.9	7.5	0.0
LnGrp LOS	B		C				C	B	D	A		
Approach Vol, veh/h		775						742			544	
Approach Delay, s/veh		22.6						29.5			12.6	
Approach LOS		C						C			B	
Timer - Assigned Phs	1	2	4	6								
Phs Duration (G+Y+Rc), s	8.3	22.5	20.9	30.8								
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5								
Max Green Setting (Gmax), s	5.0	18.0	18.0	18.0								
Max Q Clear Time (g_c+I1), s	4.8	17.4	15.0	5.6								
Green Ext Time (p_c), s	0.0	0.3	1.4	2.3								
Intersection Summary												
HCM 7th Control Delay, s/veh			22.4									
HCM 7th LOS			C									

HCM 7th Signalized Intersection Summary

1: Tennessee St & W Lugonia Ave

10/15/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	793	432	86	372	138	271	342	276	100	106	23
Future Volume (veh/h)	76	793	432	86	372	138	271	342	276	100	106	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	77	801	436	87	376	139	274	345	279	101	107	23
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	106	1025	457	112	546	463	143	553	469	130	539	457
Arrive On Green	0.06	0.29	0.29	0.06	0.29	0.29	0.08	0.29	0.29	0.07	0.29	0.29
Sat Flow, veh/h	1795	3582	1598	1795	1885	1598	1795	1885	1598	1795	1885	1598
Grp Volume(v), veh/h	77	801	436	87	376	139	274	345	279	101	107	23
Grp Sat Flow(s),veh/h/ln	1795	1791	1598	1795	1885	1598	1795	1885	1598	1795	1885	1598
Q Serve(g_s), s	2.7	12.9	16.9	3.0	11.1	4.3	5.0	10.0	9.4	3.5	2.7	0.7
Cycle Q Clear(g_c), s	2.7	12.9	16.9	3.0	11.1	4.3	5.0	10.0	9.4	3.5	2.7	0.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	106	1025	457	112	546	463	143	553	469	130	539	457
V/C Ratio(X)	0.73	0.78	0.95	0.78	0.69	0.30	1.92	0.62	0.60	0.78	0.20	0.05
Avail Cap(c_a), veh/h	143	1025	457	143	546	463	143	553	469	143	539	457
HCM 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
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.1	20.6	22.0	29.1	19.8	17.4	29.0	19.2	19.0	28.7	17.0	16.3
Incr Delay (d2), s/veh	11.7	4.0	30.5	18.6	3.6	0.4	438.9	5.2	5.5	21.8	0.8	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	5.3	9.4	1.8	4.8	1.4	19.4	4.8	3.8	2.2	1.2	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	40.8	24.6	52.6	47.7	23.5	17.8	467.9	24.5	24.5	50.5	17.8	16.5
LnGrp LOS	D	C	D	D	C	B	F	C	C	D	B	B
Approach Vol, veh/h	1314			602			898			231		
Approach Delay, s/veh	34.8			25.7			159.8			32.0		
Approach LOS	C			C			F			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.0	23.0	8.4	22.5	9.5	22.5	8.2	22.7				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	18.0	5.0	18.0	5.0	18.0	5.0	18.0				
Max Q Clear Time (g_c+I1), s	5.5	12.0	5.0	18.9	7.0	4.7	4.7	13.1				
Green Ext Time (p_c), s	0.0	1.7	0.0	0.0	0.0	0.4	0.0	1.2				
Intersection Summary												
HCM 7th Control Delay, s/veh	69.7											
HCM 7th LOS	E											

HCM 7th Signalized Intersection Summary
 2: HD Parking Lot & W Lugonia Ave

10/15/2025



Movement	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑		↔	↑	↔	
Traffic Volume (veh/h)	1069	97	1	39	528	87	84
Future Volume (veh/h)	1069	97	1	39	528	87	84
Initial Q (Qb), veh	0	0		0	0	0	0
Lane Width Adj.	1.00	1.00		1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00		1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach	No				No	No	
Adj Sat Flow, veh/h/ln	1885	1885		1885	1885	1885	1885
Adj Flow Rate, veh/h	1114	101		41	550	91	88
Peak Hour Factor	0.96	0.96		0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1		1	1	1	1
Cap, veh/h	1237	552		77	897	299	289
Arrive On Green	0.35	0.35		0.04	0.48	0.35	0.35
Sat Flow, veh/h	3676	1598		1795	1885	856	828
Grp Volume(v), veh/h	1114	101		41	550	180	0
Grp Sat Flow(s),veh/h/ln	1791	1598		1795	1885	1693	0
Q Serve(g_s), s	15.2	2.3		1.2	11.1	4.0	0.0
Cycle Q Clear(g_c), s	15.2	2.3		1.2	11.1	4.0	0.0
Prop In Lane		1.00		1.00		0.51	0.49
Lane Grp Cap(c), veh/h	1237	552		77	897	592	0
V/C Ratio(X)	0.90	0.18		0.53	0.61	0.30	0.00
Avail Cap(c_a), veh/h	1252	558		174	897	592	0
HCM Platoon Ratio	1.00	1.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00		1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.0	11.8		24.1	10.0	12.2	0.0
Incr Delay (d2), s/veh	9.1	0.2		5.5	1.2	1.3	0.0
Initial Q Delay(d3), s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	0.7		0.6	3.6	1.5	0.0
Unsig. Movement Delay, s/veh							
LnGrp Delay(d), s/veh	25.1	11.9		29.7	11.2	13.5	0.0
LnGrp LOS	C	B		C	B	B	
Approach Vol, veh/h	1215				591	180	
Approach Delay, s/veh	24.0				12.5	13.5	
Approach LOS	C				B	B	
Timer - Assigned Phs		2	3	4			8
Phs Duration (G+Y+Rc), s		22.5	6.7	22.3			29.0
Change Period (Y+Rc), s		4.5	4.5	4.5			4.5
Max Green Setting (Gmax), s		18.0	5.0	18.0			18.0
Max Q Clear Time (g_c+I1), s		6.0	3.2	17.2			13.1
Green Ext Time (p_c), s		0.4	0.0	0.6			1.4
Intersection Summary							
HCM 7th Control Delay, s/veh			19.6				
HCM 7th LOS			B				
Notes							
User approved ignoring U-Turning movement.							

HCM 7th Signalized Intersection Summary
 3: New York St & W Lugonia Ave

10/15/2025



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1024	226	27	412	179	50
Future Volume (veh/h)	1024	226	27	412	179	50
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	1056	233	28	425	185	52
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	1554	693	216	1249	164	46
Arrive On Green	0.43	0.43	0.12	0.66	0.12	0.12
Sat Flow, veh/h	3676	1598	1795	1885	1359	382
Grp Volume(v), veh/h	1056	233	28	425	238	0
Grp Sat Flow(s),veh/h/ln	1791	1598	1795	1885	1748	0
Q Serve(g_s), s	9.8	4.0	0.6	4.1	5.0	0.0
Cycle Q Clear(g_c), s	9.8	4.0	0.6	4.1	5.0	0.0
Prop In Lane		1.00	1.00		0.78	0.22
Lane Grp Cap(c), veh/h	1554	693	216	1249	211	0
V/C Ratio(X)	0.68	0.34	0.13	0.34	1.13	0.00
Avail Cap(c_a), veh/h	1554	693	216	1249	211	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	9.4	7.8	16.3	3.0	18.3	0.0
Incr Delay (d2), s/veh	2.4	1.3	1.2	0.7	101.3	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	1.1	0.3	0.5	7.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	11.9	9.1	17.5	3.8	119.5	0.0
LnGrp LOS	B	A	B	A	F	
Approach Vol, veh/h	1289			453	238	
Approach Delay, s/veh	11.4			4.6	119.5	
Approach LOS	B			A	F	
Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		9.5	9.5	22.5		32.0
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s		5.0	5.0	18.0		18.0
Max Q Clear Time (g_c+I1), s		7.0	2.6	11.8		6.1
Green Ext Time (p_c), s		0.0	0.0	3.7		1.9
Intersection Summary						
HCM 7th Control Delay, s/veh			22.8			
HCM 7th LOS			C			

HCM 7th Signalized Intersection Summary

4: Texas St & W Lugonia Ave

10/15/2025

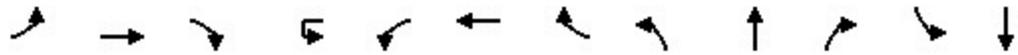


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	818	121	65	299	24	86	261	94	21	197	41
Future Volume (veh/h)	61	818	121	65	299	24	86	261	94	21	197	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	62	826	122	66	302	24	87	264	95	21	199	41
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	103	1002	148	107	1084	86	196	492	566	102	623	566
Arrive On Green	0.06	0.32	0.32	0.06	0.32	0.32	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	1795	3131	462	1795	3363	266	303	1388	1598	70	1757	1598
Grp Volume(v), veh/h	62	473	475	66	160	166	351	0	95	220	0	41
Grp Sat Flow(s),veh/h/ln	1795	1791	1802	1795	1791	1837	1691	0	1598	1827	0	1598
Q Serve(g_s), s	1.7	12.4	12.4	1.8	3.4	3.4	3.6	0.0	2.1	0.0	0.0	0.9
Cycle Q Clear(g_c), s	1.7	12.4	12.4	1.8	3.4	3.4	8.1	0.0	2.1	4.3	0.0	0.9
Prop In Lane	1.00		0.26	1.00		0.14	0.25		1.00	0.10		1.00
Lane Grp Cap(c), veh/h	103	573	577	107	577	592	688	0	566	725	0	566
V/C Ratio(X)	0.60	0.82	0.82	0.62	0.28	0.28	0.51	0.00	0.17	0.30	0.00	0.07
Avail Cap(c_a), veh/h	177	635	639	177	635	651	688	0	566	725	0	566
HCM 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
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.4	15.9	15.9	23.3	12.8	12.8	13.1	0.0	11.3	12.0	0.0	10.9
Incr Delay (d2), s/veh	5.5	8.0	8.0	5.6	0.3	0.3	2.7	0.0	0.6	1.1	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	5.3	5.3	0.8	1.1	1.2	3.2	0.0	0.7	1.8	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.9	23.9	23.9	29.0	13.1	13.1	15.8	0.0	11.9	13.1	0.0	11.1
LnGrp LOS	C	C	C	C	B	B	B		B	B		B
Approach Vol, veh/h		1010			392			446				261
Approach Delay, s/veh		24.2			15.7			15.0				12.8
Approach LOS		C			B			B				B
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.5	7.5	20.8		22.5	7.4	20.9				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		18.0	5.0	18.0		18.0	5.0	18.0				
Max Q Clear Time (g_c+I1), s		10.1	3.8	14.4		6.3	3.7	5.4				
Green Ext Time (p_c), s		1.6	0.0	1.9		1.0	0.0	1.3				
Intersection Summary												
HCM 7th Control Delay, s/veh				19.3								
HCM 7th LOS				B								

HCM 7th Signalized Intersection Summary

5: Orange St & E Lugonia Ave

10/15/2025



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	48	676	133	3	74	293	69	59	340	89	110	309
Future Volume (veh/h)	48	676	133	3	74	293	69	59	340	89	110	309
Initial Q (Qb), veh	0	0	0		0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00		1.00		1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885		1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	49	690	136		76	299	70	60	347	91	112	315
Peak Hour Factor	0.98	0.98	0.98		0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1		1	1	1	1	1	1	1	1
Cap, veh/h	83	812	160		106	538	456	94	555	470	143	607
Arrive On Green	0.05	0.27	0.27		0.06	0.29	0.29	0.05	0.29	0.29	0.08	0.32
Sat Flow, veh/h	1795	2983	587		1795	1885	1598	1795	1885	1598	1795	1885
Grp Volume(v), veh/h	49	414	412		76	299	70	60	347	91	112	315
Grp Sat Flow(s),veh/h/ln	1795	1791	1779		1795	1885	1598	1795	1885	1598	1795	1885
Q Serve(g_s), s	1.6	13.4	13.4		2.5	8.2	2.0	2.0	9.7	2.6	3.7	8.3
Cycle Q Clear(g_c), s	1.6	13.4	13.4		2.5	8.2	2.0	2.0	9.7	2.6	3.7	8.3
Prop In Lane	1.00		0.33		1.00		1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	83	488	484		106	538	456	94	555	470	143	607
V/C Ratio(X)	0.59	0.85	0.85		0.71	0.56	0.15	0.64	0.63	0.19	0.78	0.52
Avail Cap(c_a), veh/h	147	527	524		147	555	470	147	555	470	147	607
HCM Platoon Ratio	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.6	21.1	21.1		28.3	18.6	16.3	28.4	18.7	16.1	27.6	16.9
Incr Delay (d2), s/veh	6.5	11.8	11.9		9.6	1.2	0.2	7.0	5.3	0.9	22.8	3.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	6.5	6.5		1.3	3.3	0.7	1.0	4.7	1.0	2.4	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.1	32.8	33.0		37.9	19.7	16.5	35.5	23.9	17.1	50.4	20.0
LnGrp LOS	D	C	C		D	B	B	D	C	B	D	C
Approach Vol, veh/h		875				445			498			485
Approach Delay, s/veh		33.1				22.3			24.1			26.5
Approach LOS		C				C			C			C
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.4	22.5	8.1	21.1	7.7	24.2	7.3	21.9				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	18.0	5.0	18.0	5.0	18.0	5.0	18.0				
Max Q Clear Time (g_c+I1), s	5.7	11.7	4.5	15.4	4.0	10.3	3.6	10.2				
Green Ext Time (p_c), s	0.0	1.3	0.0	1.2	0.0	1.2	0.0	1.1				

Intersection Summary												
HCM 7th Control Delay, s/veh			27.6									
HCM 7th LOS			C									

Notes
User approved ignoring U-Turning movement.

HCM 7th Signalized Intersection Summary
 5: Orange St & E Lugonia Ave

10/15/2025



Movement	SBR
Lane Configurations	7
Traffic Volume (veh/h)	57
Future Volume (veh/h)	57
Initial Q (Qb), veh	0
Lane Width Adj.	1.00
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1885
Adj Flow Rate, veh/h	58
Peak Hour Factor	0.98
Percent Heavy Veh, %	1
Cap, veh/h	514
Arrive On Green	0.32
Sat Flow, veh/h	1598
Grp Volume(v), veh/h	58
Grp Sat Flow(s),veh/h/ln	1598
Q Serve(g_s), s	1.6
Cycle Q Clear(g_c), s	1.6
Prop In Lane	1.00
Lane Grp Cap(c), veh/h	514
V/C Ratio(X)	0.11
Avail Cap(c_a), veh/h	514
HCM Platoon Ratio	1.00
Upstream Filter(l)	1.00
Uniform Delay (d), s/veh	14.6
Incr Delay (d2), s/veh	0.4
Initial Q Delay(d3), s/veh	0.0
%ile BackOfQ(50%),veh/ln	0.6
Unsig. Movement Delay, s/veh	
LnGrp Delay(d), s/veh	15.0
LnGrp LOS	B
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

HCM 7th Signalized Intersection Summary

6: Texas St & San Bernardino Ave

10/15/2025

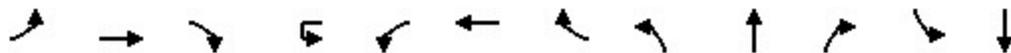


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	632	64	30	335	34	75	144	55	32	146	58
Future Volume (veh/h)	55	632	64	30	335	34	75	144	55	32	146	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	57	658	67	31	349	35	78	150	57	33	152	60
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	97	591	60	62	625	530	198	352	115	557	662	647
Arrive On Green	0.05	0.35	0.35	0.03	0.33	0.33	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	1795	1683	171	1795	1885	1598	310	1002	328	1184	1885	1598
Grp Volume(v), veh/h	57	0	725	31	349	35	285	0	0	33	152	60
Grp Sat Flow(s),veh/h/ln	1795	0	1854	1795	1885	1598	1640	0	0	1184	1885	1598
Q Serve(g_s), s	1.6	0.0	18.0	0.9	7.8	0.8	1.4	0.0	0.0	0.0	2.9	1.2
Cycle Q Clear(g_c), s	1.6	0.0	18.0	0.9	7.8	0.8	6.4	0.0	0.0	1.0	2.9	1.2
Prop In Lane	1.00		0.09	1.00		1.00	0.27		0.20	1.00		1.00
Lane Grp Cap(c), veh/h	97	0	651	62	625	530	665	0	0	557	662	647
V/C Ratio(X)	0.59	0.00	1.11	0.50	0.56	0.07	0.43	0.00	0.00	0.06	0.23	0.09
Avail Cap(c_a), veh/h	175	0	651	175	662	561	665	0	0	557	662	647
HCM 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
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.7	0.0	16.6	24.3	14.1	11.7	12.8	0.0	0.0	11.1	11.7	9.4
Incr Delay (d2), s/veh	5.5	0.0	70.8	6.0	0.9	0.1	2.0	0.0	0.0	0.2	0.8	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	19.2	0.4	3.0	0.2	2.5	0.0	0.0	0.2	1.2	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.2	0.0	87.5	30.3	15.0	11.8	14.8	0.0	0.0	11.3	12.6	9.7
LnGrp LOS	C		F	C	B	B	B			B	B	A
Approach Vol, veh/h	782				415		285				245	
Approach Delay, s/veh	83.2				15.9		14.8				11.7	
Approach LOS	F				B		B				B	
Timer - Assigned Phs	2		3		4		6		7		8	
Phs Duration (G+Y+Rc), s	22.5		6.3		22.5		22.5		7.3		21.5	
Change Period (Y+Rc), s	4.5		4.5		4.5		4.5		4.5		4.5	
Max Green Setting (Gmax), s	18.0		5.0		18.0		18.0		5.0		18.0	
Max Q Clear Time (g_c+I1), s	8.4		2.9		20.0		4.9		3.6		9.8	
Green Ext Time (p_c), s	1.2		0.0		0.0		0.9		0.0		1.4	
Intersection Summary												
HCM 7th Control Delay, s/veh			45.6									
HCM 7th LOS			D									

HCM 7th Signalized Intersection Summary

7: Tennessee St & San Bernardino Ave

10/15/2025



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	589	610	180	1	36	317	199	29	498	26	260	21
Future Volume (veh/h)	589	610	180	1	36	317	199	29	498	26	260	21
Initial Q (Qb), veh	0	0	0		0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00		1.00		1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885		1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	607	629	186		37	327	205	30	513	27	268	22
Peak Hour Factor	0.97	0.97	0.97		0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1		1	1	1	1	1	1	1	1
Cap, veh/h	284	553	469		68	471	399	59	1016	53	146	96
Arrive On Green	0.08	0.29	0.29		0.04	0.25	0.25	0.03	0.29	0.29	0.08	0.34
Sat Flow, veh/h	3483	1885	1598		1795	1885	1598	1795	3462	182	1795	280
Grp Volume(v), veh/h	607	629	186		37	327	205	30	265	275	268	0
Grp Sat Flow(s),veh/h/ln	1742	1885	1598		1795	1885	1598	1795	1791	1852	1795	0
Q Serve(g_s), s	5.0	18.0	5.7		1.2	9.7	6.8	1.0	7.5	7.6	5.0	0.0
Cycle Q Clear(g_c), s	5.0	18.0	5.7		1.2	9.7	6.8	1.0	7.5	7.6	5.0	0.0
Prop In Lane	1.00		1.00		1.00		1.00	1.00		0.10	1.00	
Lane Grp Cap(c), veh/h	284	553	469		68	471	399	59	526	544	146	0
V/C Ratio(X)	2.14	1.14	0.40		0.54	0.69	0.51	0.51	0.50	0.51	1.83	0.00
Avail Cap(c_a), veh/h	284	553	469		146	553	469	146	526	544	146	0
HCM Platoon Ratio	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	28.2	21.7	17.3		29.0	20.9	19.8	29.2	18.0	18.0	28.2	0.0
Incr Delay (d2), s/veh	523.7	82.0	0.5		6.5	3.0	1.0	6.8	3.4	3.3	399.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	22.6	19.8	2.0		0.6	4.3	0.1	0.5	3.3	3.5	18.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	551.9	103.6	17.9		35.5	23.9	20.8	36.0	21.4	21.3	427.6	0.0
LnGrp LOS	F	F	B		D	C	C	D	C	C	F	
Approach Vol, veh/h		1422				569			570			397
Approach Delay, s/veh		283.7				23.5			22.1			293.6
Approach LOS		F				C			C			F
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.5	22.5	6.8	22.5	6.5	25.5	9.5	19.8				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	18.0	5.0	18.0	5.0	18.0	5.0	18.0				
Max Q Clear Time (g_c+I1), s	7.0	9.6	3.2	20.0	3.0	5.4	7.0	11.7				
Green Ext Time (p_c), s	0.0	2.1	0.0	0.0	0.0	0.5	0.0	1.5				

Intersection Summary		
HCM 7th Control Delay, s/veh		184.6
HCM 7th LOS		F

Notes
User approved ignoring U-Turning movement.

HCM 7th Signalized Intersection Summary

7: Tennessee St & San Bernardino Ave

10/15/2025

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	104
Future Volume (veh/h)	104
Initial Q (Qb), veh	0
Lane Width Adj.	1.00
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1885
Adj Flow Rate, veh/h	107
Peak Hour Factor	0.97
Percent Heavy Veh, %	1
Cap, veh/h	466
Arrive On Green	0.34
Sat Flow, veh/h	1361
Grp Volume(v), veh/h	129
Grp Sat Flow(s),veh/h/ln	1640
Q Serve(g_s), s	3.4
Cycle Q Clear(g_c), s	3.4
Prop In Lane	0.83
Lane Grp Cap(c), veh/h	562
V/C Ratio(X)	0.23
Avail Cap(c_a), veh/h	562
HCM Platoon Ratio	1.00
Upstream Filter(l)	1.00
Uniform Delay (d), s/veh	14.4
Incr Delay (d2), s/veh	1.0
Initial Q Delay(d3), s/veh	0.0
%ile BackOfQ(50%),veh/ln	1.3
Unsig. Movement Delay, s/veh	
LnGrp Delay(d), s/veh	15.4
LnGrp LOS	B
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

HCM 7th Signalized Intersection Summary
 8: Citrus Plaza Dr & San Bernardino Ave

10/15/2025



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL
Lane Configurations		↔	↕	↗	↖	↕	↗		↔	↕	↗	↖
Traffic Volume (veh/h)	3	58	741	104	112	230	130	1	28	37	334	303
Future Volume (veh/h)	3	58	741	104	112	230	130	1	28	37	334	303
Initial Q (Qb), veh		0	0	0	0	0	0		0	0	0	0
Lane Width Adj.		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00		1.00	1.00		1.00		1.00		1.00	1.00
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach		No			No				No			
Adj Sat Flow, veh/h/ln		1885	1885	1885	1885	1885	1885		1885	1885	1885	1885
Adj Flow Rate, veh/h		59	756	106	114	235	133		29	38	341	309
Peak Hour Factor		0.98	0.98	0.98	0.98	0.98	0.98		0.98	0.98	0.98	0.98
Percent Heavy Veh, %		1	1	1	1	1	1		1	1	1	1
Cap, veh/h		92	931	415	144	545	462		57	546	591	144
Arrive On Green		0.05	0.26	0.26	0.08	0.29	0.29		0.03	0.29	0.29	0.08
Sat Flow, veh/h		1795	3582	1598	1795	1885	1598		1795	1885	1598	1795
Grp Volume(v), veh/h		59	756	106	114	235	133		29	38	341	309
Grp Sat Flow(s),veh/h/ln		1795	1791	1598	1795	1885	1598		1795	1885	1598	1795
Q Serve(g_s), s		2.0	12.3	3.3	3.9	6.3	4.0		1.0	0.9	10.6	5.0
Cycle Q Clear(g_c), s		2.0	12.3	3.3	3.9	6.3	4.0		1.0	0.9	10.6	5.0
Prop In Lane		1.00		1.00	1.00		1.00		1.00		1.00	1.00
Lane Grp Cap(c), veh/h		92	931	415	144	545	462		57	546	591	144
V/C Ratio(X)		0.64	0.81	0.26	0.79	0.43	0.29		0.51	0.07	0.58	2.14
Avail Cap(c_a), veh/h		144	1037	463	144	546	463		144	546	591	144
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh		28.9	21.6	18.2	28.1	17.9	17.1		29.6	16.0	15.7	28.6
Incr Delay (d2), s/veh		7.2	4.5	0.3	24.8	0.5	0.3		6.9	0.2	4.1	535.3
Initial Q Delay(d3), s/veh		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.0	5.3	1.2	2.6	2.6	1.4		0.5	0.4	4.1	23.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh		36.1	26.1	18.6	52.9	18.5	17.5		36.5	16.3	19.7	563.8
LnGrp LOS		D	C	B	D	B	B		D	B	B	F
Approach Vol, veh/h		921			482				408			
Approach Delay, s/veh		25.9			26.3				20.6			
Approach LOS		C			C				C			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.5	22.5	9.5	20.7	6.5	25.5	7.7	22.5				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	18.0	5.0	18.0	5.0	18.0	5.0	18.0				
Max Q Clear Time (g_c+I1), s	7.0	12.6	5.9	14.3	3.0	13.1	4.0	8.3				
Green Ext Time (p_c), s	0.0	0.7	0.0	1.9	0.0	2.0	0.0	1.2				

Intersection Summary												
HCM 7th Control Delay, s/veh			82.5									
HCM 7th LOS			F									

Notes
 User approved ignoring U-Turning movement.

HCM 7th Signalized Intersection Summary
 8: Citrus Plaza Dr & San Bernardino Ave

10/15/2025



Movement	SBT	SBR
Lane Configurations	↑↑	
Traffic Volume (veh/h)	485	234
Future Volume (veh/h)	485	234
Initial Q (Qb), veh	0	0
Lane Width Adj.	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00
Parking Bus, Adj	1.00	1.00
Work Zone On Approach	No	
Adj Sat Flow, veh/h/ln	1885	1885
Adj Flow Rate, veh/h	495	239
Peak Hour Factor	0.98	0.98
Percent Heavy Veh, %	1	1
Cap, veh/h	794	381
Arrive On Green	0.34	0.34
Sat Flow, veh/h	2346	1127
Grp Volume(v), veh/h	377	357
Grp Sat Flow(s),veh/h/ln	1791	1682
Q Serve(g_s), s	11.0	11.1
Cycle Q Clear(g_c), s	11.0	11.1
Prop In Lane		0.67
Lane Grp Cap(c), veh/h	606	569
V/C Ratio(X)	0.62	0.63
Avail Cap(c_a), veh/h	606	569
HCM Platoon Ratio	1.00	1.00
Upstream Filter(l)	1.00	1.00
Uniform Delay (d), s/veh	17.2	17.3
Incr Delay (d2), s/veh	4.8	5.2
Initial Q Delay(d3), s/veh	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	4.7
Unsig. Movement Delay, s/veh		
LnGrp Delay(d), s/veh	22.0	22.4
LnGrp LOS	C	C
Approach Vol, veh/h	1043	
Approach Delay, s/veh	182.7	
Approach LOS	F	
Timer - Assigned Phs		

HCM 7th Signalized Intersection Summary

9: W Lugonia Ave & Citrus Plaza Dr

10/15/2025



Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations							
Traffic Volume (veh/h)	80	697	389	239	556	163	
Future Volume (veh/h)	80	697	389	239	556	163	
Initial Q (Qb), veh	0	0	0	0	0	0	
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	
Work Zone On Approach		No	No		No		
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	
Adj Flow Rate, veh/h	82	711	397	244	567	166	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	
Percent Heavy Veh, %	1	1	1	1	1	1	
Cap, veh/h	139	1770	627	381	900	413	
Arrive On Green	0.08	0.49	0.29	0.29	0.26	0.26	
Sat Flow, veh/h	1795	3676	2236	1300	3483	1598	
Grp Volume(v), veh/h	82	711	331	310	567	166	
Grp Sat Flow(s),veh/h/ln	1795	1791	1791	1651	1742	1598	
Q Serve(g_s), s	1.6	4.6	5.8	5.9	5.2	3.1	
Cycle Q Clear(g_c), s	1.6	4.6	5.8	5.9	5.2	3.1	
Prop In Lane	1.00			0.79	1.00	1.00	
Lane Grp Cap(c), veh/h	139	1770	525	484	900	413	
V/C Ratio(X)	0.59	0.40	0.63	0.64	0.63	0.40	
Avail Cap(c_a), veh/h	247	1773	886	817	1724	791	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	
Uniform Delay (d), s/veh	16.2	5.8	11.2	11.2	11.9	11.2	
Incr Delay (d2), s/veh	3.9	0.1	1.3	1.4	0.7	0.6	
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/ln	0.7	0.8	1.7	1.6	1.7	3.0	
Unsig. Movement Delay, s/veh							
LnGrp Delay(d), s/veh	20.2	6.0	12.4	12.6	12.7	11.8	
LnGrp LOS	C	A	B	B	B	B	
Approach Vol, veh/h		793	641		733		
Approach Delay, s/veh		7.4	12.5		12.5		
Approach LOS		A	B		B		
Timer - Assigned Phs				4	6	7	8
Phs Duration (G+Y+Rc), s				22.5	13.9	7.3	15.2
Change Period (Y+Rc), s				4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s				18.0	18.0	5.0	18.0
Max Q Clear Time (g_c+I1), s				6.6	7.2	3.6	7.9
Green Ext Time (p_c), s				3.5	2.2	0.0	2.7
Intersection Summary							
HCM 7th Control Delay, s/veh			10.6				
HCM 7th LOS			B				

HCM 7th Signalized Intersection Summary

10: Tennessee St & I-10 WB Ramps

10/15/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					←↑↑		↑	↑↑			↑↑	
Traffic Volume (veh/h)	0	0	0	126	5	186	244	751	0	0	546	73
Future Volume (veh/h)	0	0	0	126	5	186	244	751	0	0	546	73
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No			No		
Adj Sat Flow, veh/h/ln				1885	1885	1885	1885	1885	0	0	1885	1885
Adj Flow Rate, veh/h				130	5	192	252	774	0	0	563	75
Peak Hour Factor				0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %				1	1	1	1	1	0	0	1	1
Cap, veh/h				321	12	296	200	2198	0	0	1277	170
Arrive On Green				0.19	0.19	0.19	0.11	0.61	0.00	0.00	0.40	0.40
Sat Flow, veh/h				1732	67	1598	1795	3676	0	0	3272	422
Grp Volume(v), veh/h				135	0	192	252	774	0	0	317	321
Grp Sat Flow(s),veh/h/ln				1799	0	1598	1795	1791	0	0	1791	1809
Q Serve(g_s), s				3.0	0.0	5.0	5.0	4.8	0.0	0.0	5.8	5.8
Cycle Q Clear(g_c), s				3.0	0.0	5.0	5.0	4.8	0.0	0.0	5.8	5.8
Prop In Lane				0.96		1.00	1.00		0.00	0.00		0.23
Lane Grp Cap(c), veh/h				333	0	296	200	2198	0	0	719	727
V/C Ratio(X)				0.40	0.00	0.65	1.26	0.35	0.00	0.00	0.44	0.44
Avail Cap(c_a), veh/h				723	0	642	200	2198	0	0	719	727
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				16.1	0.0	16.9	19.9	4.3	0.0	0.0	9.7	9.8
Incr Delay (d2), s/veh				0.8	0.0	2.4	149.9	0.4	0.0	0.0	2.0	1.9
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.1	0.0	1.8	10.2	1.1	0.0	0.0	2.1	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				16.9	0.0	19.3	169.8	4.7	0.0	0.0	11.7	11.7
LnGrp LOS				B		B	F	A			B	B
Approach Vol, veh/h					327			1026			638	
Approach Delay, s/veh					18.3			45.3			11.7	
Approach LOS					B			D			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		32.0			9.5	22.5		12.8				
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5				
Max Green Setting (Gmax), s		18.0			5.0	18.0		18.0				
Max Q Clear Time (g_c+I1), s		6.8			7.0	7.8		7.0				
Green Ext Time (p_c), s		4.1			0.0	2.9		1.5				
Intersection Summary												
HCM 7th Control Delay, s/veh					30.1							
HCM 7th LOS					C							

HCM 7th Signalized Intersection Summary

11: Tennessee St & I-10 EB Ramps

10/15/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔						↑	↗	↘	↕	↙
Traffic Volume (veh/h)	304	369	423	0	0	0	0	685	117	154	518	0
Future Volume (veh/h)	304	369	423	0	0	0	0	685	117	154	518	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885				0	1885	1885	1885	1885	0
Adj Flow Rate, veh/h	320	388	445				0	721	123	162	545	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1				0	1	1	1	1	0
Cap, veh/h	320	387	443				0	623	528	165	1807	0
Arrive On Green	0.33	0.33	0.33				0.00	0.33	0.33	0.09	0.50	0.00
Sat Flow, veh/h	968	1172	1341				0	1885	1598	1795	3676	0
Grp Volume(v), veh/h	607	0	546				0	721	123	162	545	0
Grp Sat Flow(s),veh/h/ln	1837	0	1644				0	1885	1598	1795	1791	0
Q Serve(g_s), s	18.0	0.0	18.0				0.0	18.0	3.0	4.9	4.8	0.0
Cycle Q Clear(g_c), s	18.0	0.0	18.0				0.0	18.0	3.0	4.9	4.8	0.0
Prop In Lane	0.53		0.82				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	607	0	543				0	623	528	165	1807	0
V/C Ratio(X)	1.00	0.00	1.00				0.00	1.16	0.23	0.98	0.30	0.00
Avail Cap(c_a), veh/h	607	0	543				0	623	528	165	1807	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	18.3	0.0	18.3				0.0	18.3	13.2	24.7	7.9	0.0
Incr Delay (d2), s/veh	36.9	0.0	39.8				0.0	88.2	1.0	65.0	0.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.8	0.0	11.9				0.0	22.0	1.1	4.9	1.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.1	0.0	58.1				0.0	106.4	14.3	89.7	8.3	0.0
LnGrp LOS	F		F				F	B	F	A		
Approach Vol, veh/h		1153						844			707	
Approach Delay, s/veh		56.5						93.0			27.0	
Approach LOS		E						F			C	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	9.5	22.5		22.5		32.0						
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5						
Max Green Setting (Gmax), s	5.0	18.0		18.0		18.0						
Max Q Clear Time (g_c+I1), s	6.9	20.0		20.0		6.8						
Green Ext Time (p_c), s	0.0	0.0		0.0		2.8						
Intersection Summary												
HCM 7th Control Delay, s/veh			60.2									
HCM 7th LOS			E									

HCM 7th Signalized Intersection Summary

1: Tennessee St & W Lugonia Ave

10/15/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	245	167	113	387	122	129	256	102	66	106	7
Future Volume (veh/h)	23	245	167	113	387	122	129	256	102	66	106	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	24	253	172	116	399	126	133	264	105	68	109	7
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	49	713	318	148	479	406	156	643	545	103	588	498
Arrive On Green	0.03	0.20	0.20	0.08	0.26	0.26	0.09	0.34	0.34	0.06	0.31	0.31
Sat Flow, veh/h	1781	3554	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	24	253	172	116	399	126	133	264	105	68	109	7
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.8	3.5	5.6	3.7	11.5	3.7	4.2	6.2	2.7	2.1	2.4	0.2
Cycle Q Clear(g_c), s	0.8	3.5	5.6	3.7	11.5	3.7	4.2	6.2	2.7	2.1	2.4	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	49	713	318	148	479	406	156	643	545	103	588	498
V/C Ratio(X)	0.49	0.35	0.54	0.78	0.83	0.31	0.86	0.41	0.19	0.66	0.19	0.01
Avail Cap(c_a), veh/h	156	1117	498	156	588	498	156	643	545	156	588	498
HCM 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
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.4	19.7	20.5	25.7	20.1	17.2	25.8	14.3	13.2	26.4	14.3	13.5
Incr Delay (d2), s/veh	7.2	0.3	1.4	21.6	8.3	0.4	34.5	1.9	0.8	7.1	0.7	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	1.3	1.9	2.3	5.4	1.2	3.2	2.7	0.9	1.1	1.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	34.7	20.0	21.9	47.3	28.5	17.6	60.3	16.3	14.0	33.5	15.0	13.6
LnGrp LOS	C	B	C	D	C	B	E	B	B	C	B	B
Approach Vol, veh/h	449			641			502			184		
Approach Delay, s/veh	21.5			29.8			27.5			21.8		
Approach LOS	C			C			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.8	24.2	9.3	16.0	9.5	22.5	6.1	19.2				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	18.0	5.0	18.0	5.0	18.0	5.0	18.0				
Max Q Clear Time (g_c+I1), s	4.1	8.2	5.7	7.6	6.2	4.4	2.8	13.5				
Green Ext Time (p_c), s	0.0	1.3	0.0	1.5	0.0	0.4	0.0	1.1				
Intersection Summary												
HCM 7th Control Delay, s/veh				26.2								
HCM 7th LOS				C								

HCM 7th Signalized Intersection Summary
 2: HD Parking Lot/Project Driveway 2 & W Lugonia Ave

10/15/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↕		↖	↕			↕		↖	↕	
Traffic Volume (veh/h)	34	280	82	27	538	22	77	0	53	33	0	25
Future Volume (veh/h)	34	280	82	27	538	22	77	0	53	33	0	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	36	295	86	28	566	23	81	0	56	35	0	26
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	194	732	210	55	670	27	0	0	736	236	0	134
Arrive On Green	0.27	0.27	0.27	0.03	0.38	0.38	0.31	0.00	0.47	0.09	0.00	0.09
Sat Flow, veh/h	821	2705	774	1767	1771	72	0	0	1572	1337	0	1572
Grp Volume(v), veh/h	36	190	191	28	0	589	0	0	56	35	0	26
Grp Sat Flow(s),veh/h/ln	821	1763	1716	1767	0	1843	0	0	1572	1337	0	1572
Q Serve(g_s), s	2.5	5.2	5.4	0.9	0.0	17.1	0.0	0.0	1.2	1.4	0.0	0.9
Cycle Q Clear(g_c), s	13.3	5.2	5.4	0.9	0.0	17.1	0.0	0.0	1.2	1.4	0.0	0.9
Prop In Lane	1.00		0.45	1.00		0.04	0.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	194	477	465	55	0	697	0	0	736	236	0	134
V/C Ratio(X)	0.19	0.40	0.41	0.51	0.00	0.84	0.00	0.00	0.08	0.15	0.00	0.19
Avail Cap(c_a), veh/h	223	540	526	150	0	697	0	0	736	532	0	482
HCM 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
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.6	17.5	17.6	28.0	0.0	16.7	0.0	0.0	8.6	25.2	0.0	25.0
Incr Delay (d2), s/veh	0.5	0.5	0.6	7.0	0.0	9.4	0.0	0.0	0.2	0.3	0.0	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.9	1.9	0.5	0.0	7.7	0.0	0.0	0.4	0.5	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	26.1	18.1	18.2	35.0	0.0	26.0	0.0	0.0	8.8	25.5	0.0	25.7
LnGrp LOS	C	B	B	D		C			A	C		C
Approach Vol, veh/h		417			617			56				61
Approach Delay, s/veh		18.8			26.4			8.8				25.6
Approach LOS		B			C			A				C
Timer - Assigned Phs		2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s		32.0	6.3	20.4	22.5	9.5		26.7				
Change Period (Y+Rc), s		4.5	4.5	4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s		18.0	5.0	18.0	18.0	18.0		18.0				
Max Q Clear Time (g_c+I1), s		3.2	2.9	15.3	0.0	3.4		19.1				
Green Ext Time (p_c), s		0.2	0.0	0.6	0.0	0.1		0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh				22.8								
HCM 7th LOS				C								

HCM 7th Signalized Intersection Summary

3: New York St & W Lugonia Ave

10/15/2025



Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations		↕↕	↗	↖	↕	↗↖	
Traffic Volume (veh/h)	1	340	83	45	592	89	23
Future Volume (veh/h)	1	340	83	45	592	89	23
Initial Q (Qb), veh		0	0	0	0	0	0
Lane Width Adj.		1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)			1.00	1.00		1.00	1.00
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No	No	
Adj Sat Flow, veh/h/ln		1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h		374	91	49	651	98	25
Peak Hour Factor		0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %		3	3	3	3	3	3
Cap, veh/h		1529	682	213	1230	164	42
Arrive On Green		0.43	0.43	0.12	0.66	0.12	0.12
Sat Flow, veh/h		3618	1572	1767	1856	1363	348
Grp Volume(v), veh/h		374	91	49	651	124	0
Grp Sat Flow(s),veh/h/ln		1763	1572	1767	1856	1725	0
Q Serve(g_s), s		2.8	1.4	1.0	7.6	2.8	0.0
Cycle Q Clear(g_c), s		2.8	1.4	1.0	7.6	2.8	0.0
Prop In Lane			1.00	1.00		0.79	0.20
Lane Grp Cap(c), veh/h		1529	682	213	1230	208	0
V/C Ratio(X)		0.24	0.13	0.23	0.53	0.60	0.00
Avail Cap(c_a), veh/h		1529	682	213	1230	208	0
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh		7.4	7.1	16.5	3.6	17.3	0.0
Incr Delay (d2), s/veh		0.4	0.4	2.5	1.6	12.0	0.0
Initial Q Delay(d3), s/veh		0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		0.7	0.4	0.5	1.1	1.7	0.0
Unsig. Movement Delay, s/veh							
LnGrp Delay(d), s/veh		7.8	7.5	19.0	5.3	29.3	0.0
LnGrp LOS		A	A	B	A	C	
Approach Vol, veh/h		465			700	124	
Approach Delay, s/veh		7.8			6.2	29.3	
Approach LOS		A			A	C	
Timer - Assigned Phs		2	3	4			8
Phs Duration (G+Y+Rc), s		9.5	9.5	22.5			32.0
Change Period (Y+Rc), s		4.5	4.5	4.5			4.5
Max Green Setting (Gmax), s		5.0	5.0	18.0			18.0
Max Q Clear Time (g_c+I1), s		4.8	3.0	4.8			9.6
Green Ext Time (p_c), s		0.0	0.0	2.1			2.6
Intersection Summary							
HCM 7th Control Delay, s/veh			9.0				
HCM 7th LOS			A				

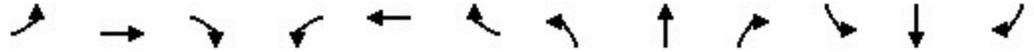
Notes

User approved ignoring U-Turning movement.

HCM 7th Signalized Intersection Summary

4: Texas St & W Lugonia Ave

10/15/2025

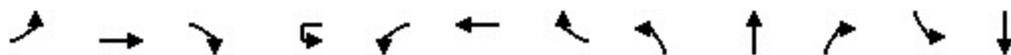


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	259	58	131	483	13	57	148	64	20	264	57
Future Volume (veh/h)	27	259	58	131	483	13	57	148	64	20	264	57
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1826	1870	1870	1856	1781	1811	1856	1870	1900	1885	1870
Adj Flow Rate, veh/h	29	278	62	141	519	14	61	159	69	22	284	61
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	5	2	2	3	8	6	3	2	0	1	2
Cap, veh/h	60	483	106	180	833	22	233	543	660	111	750	660
Arrive On Green	0.03	0.17	0.17	0.10	0.24	0.24	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	1753	2828	621	1781	3507	95	305	1304	1585	52	1801	1585
Grp Volume(v), veh/h	29	169	171	141	261	272	220	0	69	306	0	61
Grp Sat Flow(s),veh/h/ln	1753	1735	1714	1781	1763	1839	1610	0	1585	1853	0	1585
Q Serve(g_s), s	0.7	3.9	4.0	3.3	5.7	5.7	0.0	0.0	1.1	0.0	0.0	1.0
Cycle Q Clear(g_c), s	0.7	3.9	4.0	3.3	5.7	5.7	3.4	0.0	1.1	4.9	0.0	1.0
Prop In Lane	1.00		0.36	1.00		0.05	0.28		1.00	0.07		1.00
Lane Grp Cap(c), veh/h	60	296	293	180	419	437	776	0	660	861	0	660
V/C Ratio(X)	0.49	0.57	0.59	0.79	0.62	0.62	0.28	0.00	0.10	0.36	0.00	0.09
Avail Cap(c_a), veh/h	203	722	714	206	734	765	776	0	660	861	0	660
HCM 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
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.5	16.5	16.5	19.0	14.8	14.8	8.4	0.0	7.7	8.8	0.0	7.7
Incr Delay (d2), s/veh	6.0	1.7	1.9	15.9	1.5	1.5	0.9	0.0	0.3	1.1	0.0	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.4	1.4	1.9	2.0	2.0	1.2	0.0	0.3	1.8	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	26.5	18.2	18.4	34.9	16.3	16.2	9.3	0.0	8.0	9.9	0.0	7.9
LnGrp LOS	C	B	B	C	B	B	A		A	A		A
Approach Vol, veh/h		369			674			289				367
Approach Delay, s/veh		18.9			20.1			9.0				9.6
Approach LOS		B			C			A				A
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.5	8.9	11.9		22.5	6.0	14.8				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		18.0	5.0	18.0		18.0	5.0	18.0				
Max Q Clear Time (g_c+I1), s		5.4	5.3	6.0		6.9	2.7	7.7				
Green Ext Time (p_c), s		1.2	0.0	1.4		1.5	0.0	2.1				
Intersection Summary												
HCM 7th Control Delay, s/veh				15.7								
HCM 7th LOS				B								

HCM 7th Signalized Intersection Summary

5: Orange St & E Lugonia Ave

10/15/2025



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	46	212	53	1	137	539	156	40	211	57	75	298
Future Volume (veh/h)	46	212	53	1	137	539	156	40	211	57	75	298
Initial Q (Qb), veh	0	0	0		0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00		1.00		1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No				No			No			No
Adj Sat Flow, veh/h/ln	1841	1841	1841		1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	48	221	55		143	561	162	42	220	59	78	310
Peak Hour Factor	0.96	0.96	0.96		0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4		4	4	4	4	4	4	4	4
Cap, veh/h	80	728	177		145	548	465	73	548	465	106	583
Arrive On Green	0.05	0.26	0.26		0.08	0.30	0.30	0.04	0.30	0.30	0.06	0.32
Sat Flow, veh/h	1753	2788	679		1753	1841	1560	1753	1841	1560	1753	1841
Grp Volume(v), veh/h	48	137	139		143	561	162	42	220	59	78	310
Grp Sat Flow(s),veh/h/ln	1753	1749	1718		1753	1841	1560	1753	1841	1560	1753	1841
Q Serve(g_s), s	1.6	3.8	3.9		4.9	18.0	4.9	1.4	5.8	1.7	2.6	8.4
Cycle Q Clear(g_c), s	1.6	3.8	3.9		4.9	18.0	4.9	1.4	5.8	1.7	2.6	8.4
Prop In Lane	1.00		0.40		1.00		1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	80	456	448		145	548	465	73	548	465	106	583
V/C Ratio(X)	0.60	0.30	0.31		0.99	1.02	0.35	0.57	0.40	0.13	0.74	0.53
Avail Cap(c_a), veh/h	145	521	512		145	548	465	145	548	465	145	583
HCM Platoon Ratio	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.3	17.9	18.0		27.7	21.2	16.6	28.4	16.9	15.5	27.9	17.0
Incr Delay (d2), s/veh	6.9	0.4	0.4		70.2	44.4	0.4	6.8	2.2	0.6	11.9	3.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	1.4	1.4		4.7	13.4	1.6	0.7	2.6	0.6	1.4	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.2	18.3	18.3		97.8	65.6	17.1	35.3	19.1	16.0	39.8	20.4
LnGrp LOS	D	B	B		F	F	B	D	B	B	D	C
Approach Vol, veh/h		324				866			321			443
Approach Delay, s/veh		20.8				61.8			20.6			23.2
Approach LOS		C				E			C			C
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.1	22.5	9.5	20.3	7.0	23.6	7.3	22.5				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	18.0	5.0	18.0	5.0	18.0	5.0	18.0				
Max Q Clear Time (g_c+I1), s	4.6	7.8	6.9	5.9	3.4	10.4	3.6	20.0				
Green Ext Time (p_c), s	0.0	1.0	0.0	1.1	0.0	1.2	0.0	0.0				

Intersection Summary

HCM 7th Control Delay, s/veh	39.5
HCM 7th LOS	D

Notes

User approved ignoring U-Turning movement.

HCM 7th Signalized Intersection Summary
 5: Orange St & E Lugonia Ave

10/15/2025



Movement	SBR
Lane Configurations	7
Traffic Volume (veh/h)	53
Future Volume (veh/h)	53
Initial Q (Qb), veh	0
Lane Width Adj.	1.00
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1841
Adj Flow Rate, veh/h	55
Peak Hour Factor	0.96
Percent Heavy Veh, %	4
Cap, veh/h	494
Arrive On Green	0.32
Sat Flow, veh/h	1560
Grp Volume(v), veh/h	55
Grp Sat Flow(s),veh/h/ln	1560
Q Serve(g_s), s	1.5
Cycle Q Clear(g_c), s	1.5
Prop In Lane	1.00
Lane Grp Cap(c), veh/h	494
V/C Ratio(X)	0.11
Avail Cap(c_a), veh/h	494
HCM Platoon Ratio	1.00
Upstream Filter(l)	1.00
Uniform Delay (d), s/veh	14.6
Incr Delay (d2), s/veh	0.5
Initial Q Delay(d3), s/veh	0.0
%ile BackOfQ(50%),veh/ln	0.5
Unsig. Movement Delay, s/veh	
LnGrp Delay(d), s/veh	15.1
LnGrp LOS	B
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

HCM 7th Signalized Intersection Summary

6: Texas St & San Bernardino Ave

10/15/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	117	314	29	49	553	184	49	158	26	60	179	158
Future Volume (veh/h)	117	314	29	49	553	184	49	158	26	60	179	158
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	131	353	33	55	621	207	55	178	29	67	201	178
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	162	619	58	92	613	519	149	413	60	518	613	664
Arrive On Green	0.09	0.37	0.37	0.05	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1767	1671	156	1767	1856	1572	210	1251	182	1166	1856	1572
Grp Volume(v), veh/h	131	0	386	55	621	207	262	0	0	67	201	178
Grp Sat Flow(s),veh/h/ln	1767	0	1827	1767	1856	1572	1642	0	0	1166	1856	1572
Q Serve(g_s), s	4.0	0.0	9.2	1.7	18.0	5.5	0.0	0.0	0.0	0.0	4.4	4.0
Cycle Q Clear(g_c), s	4.0	0.0	9.2	1.7	18.0	5.5	6.1	0.0	0.0	2.2	4.4	4.0
Prop In Lane	1.00		0.09	1.00		1.00	0.21		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	162	0	676	92	613	519	622	0	0	518	613	664
V/C Ratio(X)	0.81	0.00	0.57	0.60	1.01	0.40	0.42	0.00	0.00	0.13	0.33	0.27
Avail Cap(c_a), veh/h	162	0	676	162	613	519	622	0	0	518	613	664
HCM 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
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.3	0.0	13.7	25.3	18.3	14.1	14.3	0.0	0.0	13.0	13.7	10.3
Incr Delay (d2), s/veh	25.3	0.0	1.1	6.2	39.7	0.5	2.1	0.0	0.0	0.5	1.4	1.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	3.5	0.8	13.4	1.8	2.6	0.0	0.0	0.6	1.9	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	49.5	0.0	14.9	31.4	58.0	14.6	16.4	0.0	0.0	13.5	15.1	11.3
LnGrp LOS	D		B	C	F	B	B			B	B	B
Approach Vol, veh/h		517			883			262			446	
Approach Delay, s/veh		23.6			46.1			16.4			13.3	
Approach LOS		C			D			B			B	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.5	7.3	24.7		22.5	9.5	22.5				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		18.0	5.0	18.0		18.0	5.0	18.0				
Max Q Clear Time (g_c+I1), s		8.1	3.7	11.2		6.4	6.0	20.0				
Green Ext Time (p_c), s		1.1	0.0	1.3		1.6	0.0	0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh			30.0									
HCM 7th LOS			C									

HCM 7th Signalized Intersection Summary

7: Tennessee St & San Bernardino Ave

10/15/2025

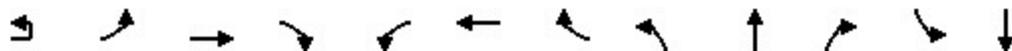


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑	↗	↖	↑	↗	↖	↑↔		↖	↗	
Traffic Volume (veh/h)	189	467	132	34	525	345	50	312	38	207	25	117
Future Volume (veh/h)	189	467	132	34	525	345	50	312	38	207	25	117
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	197	486	138	35	547	359	52	325	40	216	26	122
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	268	600	508	64	522	442	83	890	109	138	89	416
Arrive On Green	0.08	0.32	0.32	0.04	0.28	0.28	0.05	0.28	0.28	0.08	0.31	0.31
Sat Flow, veh/h	3428	1856	1572	1767	1856	1572	1767	3163	386	1767	284	1332
Grp Volume(v), veh/h	197	486	138	35	547	359	52	180	185	216	0	148
Grp Sat Flow(s),veh/h/ln	1714	1856	1572	1767	1856	1572	1767	1763	1786	1767	0	1616
Q Serve(g_s), s	3.6	15.4	4.2	1.2	18.0	13.6	1.8	5.2	5.3	5.0	0.0	4.4
Cycle Q Clear(g_c), s	3.6	15.4	4.2	1.2	18.0	13.6	1.8	5.2	5.3	5.0	0.0	4.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.22	1.00		0.82
Lane Grp Cap(c), veh/h	268	600	508	64	522	442	83	496	502	138	0	505
V/C Ratio(X)	0.74	0.81	0.27	0.55	1.05	0.81	0.62	0.36	0.37	1.56	0.00	0.29
Avail Cap(c_a), veh/h	268	600	508	138	522	442	138	496	502	138	0	505
HCM 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
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.9	19.9	16.1	30.3	23.0	21.4	29.9	18.4	18.4	29.5	0.0	16.7
Incr Delay (d2), s/veh	10.1	8.2	0.3	7.1	52.6	11.0	7.4	2.1	2.1	286.1	0.0	1.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	7.4	1.4	0.6	14.8	5.9	0.9	2.3	2.3	13.0	0.0	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	38.9	28.1	16.4	37.4	75.6	32.4	37.4	20.5	20.5	315.6	0.0	18.1
LnGrp LOS	D	C	B	D	F	C	D	C	C	F		B
Approach Vol, veh/h		821			941			417			364	
Approach Delay, s/veh		28.7			57.7			22.6			194.7	
Approach LOS		C			E			C			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.5	22.5	6.8	25.2	7.5	24.5	9.5	22.5				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	18.0	5.0	18.0	5.0	18.0	5.0	18.0				
Max Q Clear Time (g_c+I1), s	7.0	7.3	3.2	17.4	3.8	6.4	5.6	20.0				
Green Ext Time (p_c), s	0.0	1.5	0.0	0.3	0.0	0.6	0.0	0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh					62.2							
HCM 7th LOS					E							

HCM 7th Signalized Intersection Summary

8: Citrus Plaza Dr & San Bernardino Ave

10/15/2025



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations		↔	↕	↗	↖	↕	↗	↖	↕	↗	↖	↕
Traffic Volume (veh/h)	1	60	335	26	62	309	296	8	5	52	403	328
Future Volume (veh/h)	1	60	335	26	62	309	296	8	5	52	403	328
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln		1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h		67	376	29	70	347	333	9	6	58	453	369
Peak Hour Factor		0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %		3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h		99	897	400	102	475	402	21	560	565	148	660
Arrive On Green		0.06	0.25	0.25	0.06	0.26	0.26	0.01	0.30	0.30	0.08	0.37
Sat Flow, veh/h		1767	3526	1572	1767	1856	1572	1767	1856	1572	1767	1763
Grp Volume(v), veh/h		67	376	29	70	347	333	9	6	58	453	369
Grp Sat Flow(s),veh/h/ln		1767	1763	1572	1767	1856	1572	1767	1856	1572	1767	1763
Q Serve(g_s), s		2.2	5.3	0.8	2.3	10.2	11.9	0.3	0.1	1.5	5.0	9.9
Cycle Q Clear(g_c), s		2.2	5.3	0.8	2.3	10.2	11.9	0.3	0.1	1.5	5.0	9.9
Prop In Lane		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h		99	897	400	102	475	402	21	560	565	148	660
V/C Ratio(X)		0.67	0.42	0.07	0.69	0.73	0.83	0.44	0.01	0.10	3.06	0.56
Avail Cap(c_a), veh/h		148	1065	475	148	560	475	148	560	565	148	660
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh		27.6	18.5	16.9	27.6	20.3	20.9	29.3	14.6	12.7	27.3	14.8
Incr Delay (d2), s/veh		7.7	0.3	0.1	8.0	4.0	10.1	14.0	0.0	0.4	942.8	3.4
Initial Q Delay(d3), s/veh		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.1	2.0	0.3	1.2	4.6	5.1	0.2	0.1	0.5	40.8	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh		35.3	18.8	16.9	35.5	24.3	31.0	43.3	14.6	13.1	970.1	18.2
LnGrp LOS		D	B	B	D	C	C	D	B	B	F	B
Approach Vol, veh/h		472			750			73			1307	
Approach Delay, s/veh		21.1			28.3			16.9			352.2	
Approach LOS		C			C			B			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.5	22.5	7.9	19.7	5.2	26.8	7.9	19.8				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	18.0	5.0	18.0	5.0	18.0	5.0	18.0				
Max Q Clear Time (g_c+I1), s	7.0	3.5	4.3	7.3	2.3	18.6	4.2	13.9				
Green Ext Time (p_c), s	0.0	0.1	0.0	1.8	0.0	0.0	0.0	1.3				

Intersection Summary

HCM 7th Control Delay, s/veh	189.4
HCM 7th LOS	F

Notes

User approved ignoring U-Turning movement.

HCM 7th Signalized Intersection Summary
 8: Citrus Plaza Dr & San Bernardino Ave

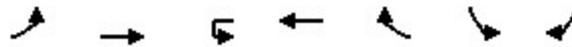
10/15/2025



Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	432
Future Volume (veh/h)	432
Initial Q (Qb), veh	0
Lane Width Adj.	1.00
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1856
Adj Flow Rate, veh/h	485
Peak Hour Factor	0.89
Percent Heavy Veh, %	3
Cap, veh/h	589
Arrive On Green	0.37
Sat Flow, veh/h	1572
Grp Volume(v), veh/h	485
Grp Sat Flow(s),veh/h/ln	1572
Q Serve(g_s), s	16.6
Cycle Q Clear(g_c), s	16.6
Prop In Lane	1.00
Lane Grp Cap(c), veh/h	589
V/C Ratio(X)	0.82
Avail Cap(c_a), veh/h	589
HCM Platoon Ratio	1.00
Upstream Filter(l)	1.00
Uniform Delay (d), s/veh	16.9
Incr Delay (d2), s/veh	12.4
Initial Q Delay(d3), s/veh	0.0
%ile BackOfQ(50%),veh/ln	7.3
Unsig. Movement Delay, s/veh	
LnGrp Delay(d), s/veh	29.3
LnGrp LOS	C
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

HCM 7th Signalized Intersection Summary
 9: W Lugonia Ave & Citrus Plaza Dr

10/15/2025



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations	↖	↗↗		↖↖		↖↖	↖
Traffic Volume (veh/h)	15	207	1	419	93	233	81
Future Volume (veh/h)	15	207	1	419	93	233	81
Initial Q (Qb), veh	0	0		0	0	0	0
Lane Width Adj.	1.00	1.00		1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00				1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No	
Adj Sat Flow, veh/h/ln	1870	1870		1870	1870	1870	1870
Adj Flow Rate, veh/h	17	230		466	103	259	90
Peak Hour Factor	0.90	0.90		0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	39	1754		881	194	595	273
Arrive On Green	0.02	0.49		0.30	0.30	0.17	0.17
Sat Flow, veh/h	1781	3647		2990	636	3456	1585
Grp Volume(v), veh/h	17	230		285	284	259	90
Grp Sat Flow(s),veh/h/ln	1781	1777		1777	1756	1728	1585
Q Serve(g_s), s	0.3	0.9		3.6	3.6	1.8	1.3
Cycle Q Clear(g_c), s	0.3	0.9		3.6	3.6	1.8	1.3
Prop In Lane	1.00				0.36	1.00	1.00
Lane Grp Cap(c), veh/h	39	1754		541	534	595	273
V/C Ratio(X)	0.43	0.13		0.53	0.53	0.44	0.33
Avail Cap(c_a), veh/h	331	2376		1188	1174	2311	1060
HCM Platoon Ratio	1.00	1.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00		1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.0	3.7		7.8	7.8	10.0	9.8
Incr Delay (d2), s/veh	7.2	0.0		0.8	0.8	0.5	0.7
Initial Q Delay(d3), s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.1		0.7	0.8	0.5	0.1
Unsig. Movement Delay, s/veh							
LnGrp Delay(d), s/veh	20.2	3.7		8.6	8.6	10.5	10.5
LnGrp LOS	C	A		A	A	B	B
Approach Vol, veh/h		247		569		349	
Approach Delay, s/veh		4.9		8.6		10.5	
Approach LOS		A		A		B	
Timer - Assigned Phs				4		6	7 8
Phs Duration (G+Y+Rc), s				17.8		9.1	5.1 12.7
Change Period (Y+Rc), s				4.5		4.5	4.5 4.5
Max Green Setting (Gmax), s				18.0		18.0	5.0 18.0
Max Q Clear Time (g_c+I1), s				2.9		3.8	2.3 5.6
Green Ext Time (p_c), s				1.1		1.0	0.0 2.6
Intersection Summary							
HCM 7th Control Delay, s/veh			8.4				
HCM 7th LOS			A				

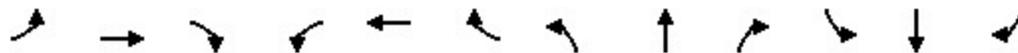
Notes

User approved ignoring U-Turning movement.

HCM 7th Signalized Intersection Summary

10: Tennessee St & I-10 WB Ramps

10/15/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					←↑↑		↑	↑↑			↑↑	
Traffic Volume (veh/h)	0	0	0	163	3	129	224	462	0	0	344	107
Future Volume (veh/h)	0	0	0	163	3	129	224	462	0	0	344	107
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No			No		
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				170	3	134	233	481	0	0	358	111
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				290	6	253	204	2242	0	0	1107	338
Arrive On Green				0.16	0.16	0.16	0.11	0.63	0.00	0.00	0.41	0.41
Sat Flow, veh/h				1781	35	1556	1781	3647	0	0	2774	819
Grp Volume(v), veh/h				170	0	137	233	481	0	0	236	233
Grp Sat Flow(s),veh/h/ln				1781	0	1590	1781	1777	0	0	1777	1723
Q Serve(g_s), s				3.9	0.0	3.4	5.0	2.5	0.0	0.0	3.9	4.0
Cycle Q Clear(g_c), s				3.9	0.0	3.4	5.0	2.5	0.0	0.0	3.9	4.0
Prop In Lane				1.00		0.98	1.00		0.00	0.00		0.48
Lane Grp Cap(c), veh/h				290	0	259	204	2242	0	0	734	711
V/C Ratio(X)				0.59	0.00	0.53	1.14	0.21	0.00	0.00	0.32	0.33
Avail Cap(c_a), veh/h				735	0	657	204	2242	0	0	734	711
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				16.9	0.0	16.7	19.3	3.4	0.0	0.0	8.7	8.7
Incr Delay (d2), s/veh				1.9	0.0	1.7	105.9	0.2	0.0	0.0	1.2	1.2
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.5	0.0	1.2	7.8	0.5	0.0	0.0	1.4	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				18.8	0.0	18.4	125.2	3.7	0.0	0.0	9.8	9.9
LnGrp LOS				B		B	F	A			A	A
Approach Vol, veh/h					307			714			469	
Approach Delay, s/veh					18.6			43.3			9.9	
Approach LOS					B			D			A	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		32.0			9.5	22.5		11.6				
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5				
Max Green Setting (Gmax), s		18.0			5.0	18.0		18.0				
Max Q Clear Time (g_c+I1), s		4.5			7.0	6.0		5.9				
Green Ext Time (p_c), s		2.6			0.0	2.2		1.4				
Intersection Summary												
HCM 7th Control Delay, s/veh					27.7							
HCM 7th LOS					C							

HCM 7th Signalized Intersection Summary

11: Tennessee St & I-10 EB Ramps

10/15/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔						↑	↗	↘	↕	↙
Traffic Volume (veh/h)	143	195	382	0	0	0	0	544	138	100	412	0
Future Volume (veh/h)	143	195	382	0	0	0	0	544	138	100	412	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	157	214	420				0	598	152	110	453	0
Peak Hour Factor	0.91	0.91	0.91				0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	244	333	499				0	648	549	140	1819	0
Arrive On Green	0.32	0.32	0.32				0.00	0.35	0.35	0.08	0.51	0.00
Sat Flow, veh/h	775	1057	1585				0	1870	1585	1781	3647	0
Grp Volume(v), veh/h	371	0	420				0	598	152	110	453	0
Grp Sat Flow(s),veh/h/ln	1832	0	1585				0	1870	1585	1781	1777	0
Q Serve(g_s), s	9.0	0.0	12.8				0.0	16.0	3.6	3.2	3.7	0.0
Cycle Q Clear(g_c), s	9.0	0.0	12.8				0.0	16.0	3.6	3.2	3.7	0.0
Prop In Lane	0.42		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	577	0	499				0	648	549	140	1819	0
V/C Ratio(X)	0.64	0.00	0.84				0.00	0.92	0.28	0.78	0.25	0.00
Avail Cap(c_a), veh/h	634	0	549				0	648	549	171	1819	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	15.3	0.0	16.6				0.0	16.3	12.3	23.5	7.1	0.0
Incr Delay (d2), s/veh	1.9	0.0	10.5				0.0	20.8	1.3	17.2	0.3	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.0	5.4				0.0	9.5	1.3	1.9	1.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	17.2	0.0	27.1				0.0	37.2	13.5	40.7	7.4	0.0
LnGrp LOS	B		C					D	B	D	A	
Approach Vol, veh/h		791						750			563	
Approach Delay, s/veh		22.5						32.4			13.9	
Approach LOS		C						C			B	
Timer - Assigned Phs	1	2		4				6				
Phs Duration (G+Y+Rc), s	8.6	22.5		20.9				31.1				
Change Period (Y+Rc), s	4.5	4.5		4.5				4.5				
Max Green Setting (Gmax), s	5.0	18.0		18.0				18.0				
Max Q Clear Time (g_c+I1), s	5.2	18.0		14.8				5.7				
Green Ext Time (p_c), s	0.0	0.0		1.5				2.4				
Intersection Summary												
HCM 7th Control Delay, s/veh			23.7									
HCM 7th LOS			C									

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	0	280	592	22	0	5
Future Vol, veh/h	0	280	592	22	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	295	623	23	0	5

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	323
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	673
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	673
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	10.4
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	673
HCM Lane V/C Ratio	-	-	-	0.008
HCM Ctrl Dly (s/v)	-	-	-	10.4
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Intersection Delay, s/veh	8.6
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	20	265	9	26	32
Future Vol, veh/h	7	20	265	9	26	32
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	21	279	9	27	34
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	7.4	8.9	7.7
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	26%	45%
Vol Thru, %	97%	0%	55%
Vol Right, %	3%	74%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	274	27	58
LT Vol	0	7	26
Through Vol	265	0	32
RT Vol	9	20	0
Lane Flow Rate	288	28	61
Geometry Grp	1	1	1
Degree of Util (X)	0.321	0.034	0.073
Departure Headway (Hd)	4.009	4.293	4.289
Convergence, Y/N	Yes	Yes	Yes
Cap	894	839	826
Service Time	2.043	2.293	2.363
HCM Lane V/C Ratio	0.322	0.033	0.074
HCM Control Delay, s/veh	8.9	7.4	7.7
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.4	0.1	0.2

Intersection	
Intersection Delay, s/veh	8.8
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	7	77	276	9	26	51
Future Vol, veh/h	7	77	276	9	26	51
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	81	291	9	27	54
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	7.7	9.4	8
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	8%	34%
Vol Thru, %	97%	0%	66%
Vol Right, %	3%	92%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	285	84	77
LT Vol	0	7	26
Through Vol	276	0	51
RT Vol	9	77	0
Lane Flow Rate	300	88	81
Geometry Grp	1	1	1
Degree of Util (X)	0.344	0.104	0.101
Departure Headway (Hd)	4.133	4.239	4.498
Convergence, Y/N	Yes	Yes	Yes
Cap	861	850	800
Service Time	2.209	2.243	2.509
HCM Lane V/C Ratio	0.348	0.104	0.101
HCM Control Delay, s/veh	9.4	7.7	8
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.5	0.3	0.3

HCM 7th Signalized Intersection Summary

1: Tennessee St & W Lugonia Ave

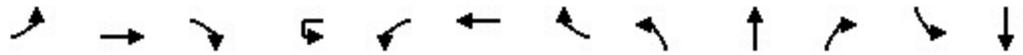
10/15/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	813	432	112	393	138	271	368	300	100	134	23
Future Volume (veh/h)	76	813	432	112	393	138	271	368	300	100	134	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	77	821	436	113	397	139	274	372	303	101	135	23
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	105	1007	449	140	568	481	140	541	459	130	530	449
Arrive On Green	0.06	0.28	0.28	0.08	0.30	0.30	0.08	0.29	0.29	0.07	0.28	0.28
Sat Flow, veh/h	1795	3582	1598	1795	1885	1598	1795	1885	1598	1795	1885	1598
Grp Volume(v), veh/h	77	821	436	113	397	139	274	372	303	101	135	23
Grp Sat Flow(s),veh/h/ln	1795	1791	1598	1795	1885	1598	1795	1885	1598	1795	1885	1598
Q Serve(g_s), s	2.7	13.7	17.3	4.0	11.9	4.3	5.0	11.2	10.7	3.5	3.5	0.7
Cycle Q Clear(g_c), s	2.7	13.7	17.3	4.0	11.9	4.3	5.0	11.2	10.7	3.5	3.5	0.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	105	1007	449	140	568	481	140	541	459	130	530	449
V/C Ratio(X)	0.74	0.81	0.97	0.81	0.70	0.29	1.95	0.69	0.66	0.78	0.25	0.05
Avail Cap(c_a), veh/h	140	1007	449	140	568	481	140	541	459	140	530	449
HCM 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
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.7	21.4	22.7	29.0	19.8	17.1	29.5	20.3	20.1	29.2	17.8	16.8
Incr Delay (d2), s/veh	12.7	5.3	34.7	28.0	3.8	0.3	453.9	7.0	7.3	22.4	1.2	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	5.8	10.0	2.7	5.2	1.4	19.7	5.6	4.4	2.3	1.6	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	42.4	26.7	57.4	57.0	23.6	17.4	483.4	27.2	27.3	51.6	19.0	17.0
LnGrp LOS	D	C	E	E	C	B	F	C	C	D	B	B
Approach Vol, veh/h		1334			649			949			259	
Approach Delay, s/veh		37.7			28.1			159.0			31.5	
Approach LOS		D			C			F			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.1	22.9	9.5	22.5	9.5	22.5	8.2	23.8				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	18.0	5.0	18.0	5.0	18.0	5.0	18.0				
Max Q Clear Time (g_c+I1), s	5.5	13.2	6.0	19.3	7.0	5.5	4.7	13.9				
Green Ext Time (p_c), s	0.0	1.5	0.0	0.0	0.0	0.6	0.0	1.1				
Intersection Summary												
HCM 7th Control Delay, s/veh			71.3									
HCM 7th LOS			E									

HCM 7th Signalized Intersection Summary
 2: HD Parking Lot/Project Driveway 2 & W Lugonia Ave

10/15/2025



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗			↖	↗			↕		↖	↗
Traffic Volume (veh/h)	44	1069	97	1	39	538	30	87	0	84	64	0
Future Volume (veh/h)	44	1069	97	1	39	538	30	87	0	84	64	0
Initial Q (Qb), veh	0	0	0		0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00		1.00		1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885		1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	46	1114	101		41	560	31	91	0	88	67	0
Peak Hour Factor	0.96	0.96	0.96		0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1		1	1	1	1	1	1	1	1
Cap, veh/h	186	903	82		72	672	37	0	0	774	300	0
Arrive On Green	0.27	0.27	0.27		0.04	0.38	0.38	0.27	0.00	0.48	0.14	0.00
Sat Flow, veh/h	832	3321	301		1795	1770	98	0	0	1598	1319	0
Grp Volume(v), veh/h	46	600	615		41	0	591	0	0	88	67	0
Grp Sat Flow(s),veh/h/ln	832	1791	1831		1795	0	1868	0	0	1598	1319	0
Q Serve(g_s), s	3.5	18.0	18.0		1.5	0.0	19.0	0.0	0.0	2.0	3.0	0.0
Cycle Q Clear(g_c), s	15.4	18.0	18.0		1.5	0.0	19.0	0.0	0.0	2.0	3.0	0.0
Prop In Lane	1.00		0.16		1.00		0.05	0.00		1.00	1.00	
Lane Grp Cap(c), veh/h	186	487	498		72	0	709	0	0	774	300	0
V/C Ratio(X)	0.25	1.23	1.24		0.57	0.00	0.83	0.00	0.00	0.11	0.22	0.00
Avail Cap(c_a), veh/h	186	487	498		136	0	709	0	0	774	467	0
HCM Platoon Ratio	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00		1.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	28.9	24.1	24.1		31.2	0.0	18.6	0.0	0.0	9.3	25.5	0.0
Incr Delay (d2), s/veh	0.7	121.8	122.3		7.0	0.0	8.4	0.0	0.0	0.3	0.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	23.2	23.8		0.7	0.0	8.6	0.0	0.0	0.7	0.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.6	145.9	146.5		38.2	0.0	27.1	0.0	0.0	9.6	25.9	0.0
LnGrp LOS	C	F	F		D		C			A	C	
Approach Vol, veh/h		1261				632			88			238
Approach Delay, s/veh		141.9				27.8			9.6			30.1
Approach LOS		F				C			A			C
Timer - Assigned Phs		2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s		36.6	7.1	22.5	22.5	14.1		29.6				
Change Period (Y+Rc), s		4.5	4.5	4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s		18.0	5.0	18.0	18.0	18.0		18.0				
Max Q Clear Time (g_c+I1), s		4.0	3.5	20.0	0.0	8.8		21.0				
Green Ext Time (p_c), s		0.3	0.0	0.0	0.0	0.8		0.0				

Intersection Summary		
HCM 7th Control Delay, s/veh		92.2
HCM 7th LOS		F

Notes
 User approved ignoring U-Turning movement.

HCM 7th Signalized Intersection Summary
 2: HD Parking Lot/Project Driveway 2 & W Lugonia Ave

10/15/2025

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	164
Future Volume (veh/h)	164
Initial Q (Qb), veh	0
Lane Width Adj.	1.00
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1885
Adj Flow Rate, veh/h	171
Peak Hour Factor	0.96
Percent Heavy Veh, %	1
Cap, veh/h	231
Arrive On Green	0.14
Sat Flow, veh/h	1598
Grp Volume(v), veh/h	171
Grp Sat Flow(s),veh/h/ln	1598
Q Serve(g_s), s	6.8
Cycle Q Clear(g_c), s	6.8
Prop In Lane	1.00
Lane Grp Cap(c), veh/h	231
V/C Ratio(X)	0.74
Avail Cap(c_a), veh/h	434
HCM Platoon Ratio	1.00
Upstream Filter(l)	1.00
Uniform Delay (d), s/veh	27.1
Incr Delay (d2), s/veh	4.6
Initial Q Delay(d3), s/veh	0.0
%ile BackOfQ(50%),veh/ln	2.8
Unsig. Movement Delay, s/veh	
LnGrp Delay(d), s/veh	31.7
LnGrp LOS	C
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

HCM 7th Signalized Intersection Summary
 3: New York St & W Lugonia Ave

10/15/2025

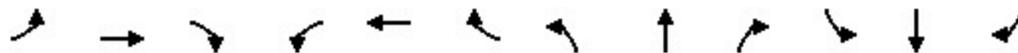


Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔↑	↗	↖	↑	↘	↙
Traffic Volume (veh/h)	1088	226	27	472	179	50
Future Volume (veh/h)	1088	226	27	472	179	50
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	1122	233	28	487	185	52
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	1554	693	216	1249	164	46
Arrive On Green	0.43	0.43	0.12	0.66	0.12	0.12
Sat Flow, veh/h	3676	1598	1795	1885	1359	382
Grp Volume(v), veh/h	1122	233	28	487	238	0
Grp Sat Flow(s),veh/h/ln	1791	1598	1795	1885	1748	0
Q Serve(g_s), s	10.7	4.0	0.6	4.9	5.0	0.0
Cycle Q Clear(g_c), s	10.7	4.0	0.6	4.9	5.0	0.0
Prop In Lane		1.00	1.00		0.78	0.22
Lane Grp Cap(c), veh/h	1554	693	216	1249	211	0
V/C Ratio(X)	0.72	0.34	0.13	0.39	1.13	0.00
Avail Cap(c_a), veh/h	1554	693	216	1249	211	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	9.7	7.8	16.3	3.2	18.3	0.0
Incr Delay (d2), s/veh	2.9	1.3	1.2	0.9	101.3	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	1.1	0.3	0.7	7.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	12.6	9.1	17.5	4.1	119.5	0.0
LnGrp LOS	B	A	B	A	F	
Approach Vol, veh/h	1355			515	238	
Approach Delay, s/veh	12.0			4.8	119.5	
Approach LOS	B			A	F	
Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		9.5	9.5	22.5		32.0
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s		5.0	5.0	18.0		18.0
Max Q Clear Time (g_c+I1), s		7.0	2.6	12.7		6.9
Green Ext Time (p_c), s		0.0	0.0	3.4		2.2
Intersection Summary						
HCM 7th Control Delay, s/veh			22.4			
HCM 7th LOS			C			

HCM 7th Signalized Intersection Summary

4: Texas St & W Lugonia Ave

10/15/2025

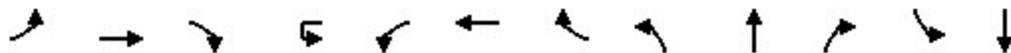


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	872	132	65	349	24	96	261	94	21	197	41
Future Volume (veh/h)	61	872	132	65	349	24	96	261	94	21	197	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	62	881	133	66	353	24	97	264	95	21	199	41
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	102	1029	155	106	1130	76	89	142	558	76	380	558
Arrive On Green	0.06	0.33	0.33	0.06	0.33	0.33	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	1795	3120	471	1795	3404	230	0	408	1598	0	1089	1598
Grp Volume(v), veh/h	62	506	508	66	185	192	361	0	95	220	0	41
Grp Sat Flow(s),veh/h/ln	1795	1791	1800	1795	1791	1844	408	0	1598	1089	0	1598
Q Serve(g_s), s	1.7	13.6	13.6	1.9	4.0	4.0	0.0	0.0	2.1	0.0	0.0	0.9
Cycle Q Clear(g_c), s	1.7	13.6	13.6	1.9	4.0	4.0	18.0	0.0	2.1	18.0	0.0	0.9
Prop In Lane	1.00		0.26	1.00		0.12	0.27		1.00	0.10		1.00
Lane Grp Cap(c), veh/h	102	590	594	106	594	612	231	0	558	457	0	558
V/C Ratio(X)	0.61	0.86	0.86	0.62	0.31	0.31	1.56	0.00	0.17	0.48	0.00	0.07
Avail Cap(c_a), veh/h	174	625	629	174	625	644	231	0	558	457	0	558
HCM 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
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.7	16.1	16.1	23.7	12.8	12.8	15.9	0.0	11.6	12.9	0.0	11.2
Incr Delay (d2), s/veh	5.6	10.9	10.8	5.8	0.3	0.3	273.2	0.0	0.7	3.6	0.0	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	6.2	6.2	0.9	1.3	1.4	19.2	0.0	0.7	2.1	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.4	27.0	27.0	29.4	13.1	13.1	289.1	0.0	12.3	16.5	0.0	11.5
LnGrp LOS	C	C	C	C	B	B	F		B	B		B
Approach Vol, veh/h		1076			443			456				261
Approach Delay, s/veh		27.1			15.6			231.4				15.7
Approach LOS		C			B			F				B
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.5	7.6	21.5		22.5	7.4	21.6				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		18.0	5.0	18.0		18.0	5.0	18.0				
Max Q Clear Time (g_c+I1), s		20.0	3.9	15.6		20.0	3.7	6.0				
Green Ext Time (p_c), s		0.0	0.0	1.4		0.0	0.0	1.6				
Intersection Summary												
HCM 7th Control Delay, s/veh				65.2								
HCM 7th LOS				E								

HCM 7th Signalized Intersection Summary

5: Orange St & E Lugonia Ave

10/15/2025



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	59	708	144	3	74	323	69	69	340	89	110	309
Future Volume (veh/h)	59	708	144	3	74	323	69	69	340	89	110	309
Initial Q (Qb), veh	0	0	0		0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00		1.00		1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885		1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	60	722	147		76	330	70	70	347	91	112	315
Peak Hour Factor	0.98	0.98	0.98		0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1		1	1	1	1	1	1	1	1
Cap, veh/h	93	826	168		106	538	456	102	549	465	143	593
Arrive On Green	0.05	0.28	0.28		0.06	0.29	0.29	0.06	0.29	0.29	0.08	0.31
Sat Flow, veh/h	1795	2964	603		1795	1885	1598	1795	1885	1598	1795	1885
Grp Volume(v), veh/h	60	436	433		76	330	70	70	347	91	112	315
Grp Sat Flow(s),veh/h/ln	1795	1791	1777		1795	1885	1598	1795	1885	1598	1795	1885
Q Serve(g_s), s	2.0	14.4	14.4		2.6	9.4	2.0	2.4	9.9	2.6	3.8	8.5
Cycle Q Clear(g_c), s	2.0	14.4	14.4		2.6	9.4	2.0	2.4	9.9	2.6	3.8	8.5
Prop In Lane	1.00		0.34		1.00		1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	93	499	495		106	538	456	102	549	465	143	593
V/C Ratio(X)	0.64	0.87	0.87		0.72	0.61	0.15	0.69	0.63	0.20	0.78	0.53
Avail Cap(c_a), veh/h	145	522	517		145	549	465	145	549	465	145	593
HCM Platoon Ratio	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.7	21.3	21.3		28.6	19.1	16.5	28.6	19.0	16.5	27.9	17.4
Incr Delay (d2), s/veh	7.2	14.7	14.9		10.1	2.0	0.2	8.0	5.5	0.9	23.2	3.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	7.2	7.2		1.3	3.9	0.7	1.2	4.8	1.0	2.5	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.9	36.0	36.2		38.7	21.1	16.6	36.6	24.5	17.4	51.1	20.8
LnGrp LOS	D	D	D		D	C	B	D	C	B	D	C
Approach Vol, veh/h		929				476			508			495
Approach Delay, s/veh		36.1				23.2			24.9			27.0
Approach LOS		D				C			C			C
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.4	22.5	8.1	21.7	8.0	23.9	7.7	22.2				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	18.0	5.0	18.0	5.0	18.0	5.0	18.0				
Max Q Clear Time (g_c+I1), s	5.8	11.9	4.6	16.4	4.4	10.5	4.0	11.4				
Green Ext Time (p_c), s	0.0	1.2	0.0	0.9	0.0	1.2	0.0	1.1				

Intersection Summary												
HCM 7th Control Delay, s/veh			29.3									
HCM 7th LOS			C									

Notes
User approved ignoring U-Turning movement.

HCM 7th Signalized Intersection Summary
 5: Orange St & E Lugonia Ave

10/15/2025



Movement	SBR
Lane Configurations	7
Traffic Volume (veh/h)	67
Future Volume (veh/h)	67
Initial Q (Qb), veh	0
Lane Width Adj.	1.00
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1885
Adj Flow Rate, veh/h	68
Peak Hour Factor	0.98
Percent Heavy Veh, %	1
Cap, veh/h	503
Arrive On Green	0.31
Sat Flow, veh/h	1598
Grp Volume(v), veh/h	68
Grp Sat Flow(s),veh/h/ln	1598
Q Serve(g_s), s	1.9
Cycle Q Clear(g_c), s	1.9
Prop In Lane	1.00
Lane Grp Cap(c), veh/h	503
V/C Ratio(X)	0.14
Avail Cap(c_a), veh/h	503
HCM Platoon Ratio	1.00
Upstream Filter(l)	1.00
Uniform Delay (d), s/veh	15.2
Incr Delay (d2), s/veh	0.6
Initial Q Delay(d3), s/veh	0.0
%ile BackOfQ(50%),veh/ln	0.7
Unsig. Movement Delay, s/veh	
LnGrp Delay(d), s/veh	15.7
LnGrp LOS	B
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

HCM 7th Signalized Intersection Summary

6: Texas St & San Bernardino Ave

10/15/2025

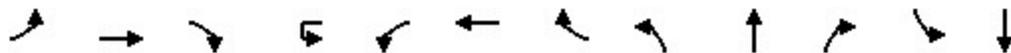


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	643	75	30	345	34	85	144	55	32	146	68
Future Volume (veh/h)	66	643	75	30	345	34	85	144	55	32	146	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	69	670	78	31	359	35	89	150	57	33	152	71
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	110	582	68	62	612	519	214	335	109	550	662	658
Arrive On Green	0.06	0.35	0.35	0.03	0.32	0.32	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	1795	1657	193	1795	1885	1598	349	954	311	1184	1885	1598
Grp Volume(v), veh/h	69	0	748	31	359	35	296	0	0	33	152	71
Grp Sat Flow(s),veh/h/ln	1795	0	1850	1795	1885	1598	1614	0	0	1184	1885	1598
Q Serve(g_s), s	1.9	0.0	18.0	0.9	8.1	0.8	2.4	0.0	0.0	0.0	2.9	1.4
Cycle Q Clear(g_c), s	1.9	0.0	18.0	0.9	8.1	0.8	6.9	0.0	0.0	1.0	2.9	1.4
Prop In Lane	1.00		0.10	1.00		1.00	0.30		0.19	1.00		1.00
Lane Grp Cap(c), veh/h	110	0	649	62	612	519	658	0	0	550	662	658
V/C Ratio(X)	0.63	0.00	1.15	0.50	0.59	0.07	0.45	0.00	0.00	0.06	0.23	0.11
Avail Cap(c_a), veh/h	175	0	649	175	662	561	658	0	0	550	662	658
HCM 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
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.5	0.0	16.6	24.3	14.4	12.0	12.9	0.0	0.0	11.1	11.7	9.3
Incr Delay (d2), s/veh	5.8	0.0	85.1	6.0	1.2	0.1	2.2	0.0	0.0	0.2	0.8	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	21.7	0.4	3.2	0.2	2.7	0.0	0.0	0.2	1.2	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.4	0.0	101.8	30.3	15.6	12.0	15.2	0.0	0.0	11.3	12.6	9.6
LnGrp LOS	C		F	C	B	B	B			B	B	A
Approach Vol, veh/h		817			425			296			256	
Approach Delay, s/veh		95.7			16.4			15.2			11.6	
Approach LOS		F			B			B			B	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.5	6.3	22.5		22.5	7.6	21.2				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		18.0	5.0	18.0		18.0	5.0	18.0				
Max Q Clear Time (g_c+I1), s		8.9	2.9	20.0		4.9	3.9	10.1				
Green Ext Time (p_c), s		1.2	0.0	0.0		0.9	0.0	1.4				
Intersection Summary												
HCM 7th Control Delay, s/veh			51.6									
HCM 7th LOS			D									

HCM 7th Signalized Intersection Summary

7: Tennessee St & San Bernardino Ave

10/15/2025



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↖↗	↑	↗		↖	↑	↗	↖	↑↗		↖	↗
Traffic Volume (veh/h)	589	640	180	1	36	347	199	61	509	58	260	31
Future Volume (veh/h)	589	640	180	1	36	347	199	61	509	58	260	31
Initial Q (Qb), veh	0	0	0		0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00		1.00		1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885		1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	607	660	186		37	358	205	63	525	60	268	32
Peak Hour Factor	0.97	0.97	0.97		0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1		1	1	1	1	1	1	1	1
Cap, veh/h	284	553	469		68	471	399	96	951	108	146	122
Arrive On Green	0.08	0.29	0.29		0.04	0.25	0.25	0.05	0.29	0.29	0.08	0.32
Sat Flow, veh/h	3483	1885	1598		1795	1885	1598	1795	3240	369	1795	381
Grp Volume(v), veh/h	607	660	186		37	358	205	63	289	296	268	0
Grp Sat Flow(s),veh/h/ln	1742	1885	1598		1795	1885	1598	1795	1791	1819	1795	0
Q Serve(g_s), s	5.0	18.0	5.7		1.2	10.8	6.8	2.1	8.4	8.4	5.0	0.0
Cycle Q Clear(g_c), s	5.0	18.0	5.7		1.2	10.8	6.8	2.1	8.4	8.4	5.0	0.0
Prop In Lane	1.00		1.00		1.00		1.00	1.00		0.20	1.00	
Lane Grp Cap(c), veh/h	284	553	469		68	471	399	96	526	534	146	0
V/C Ratio(X)	2.14	1.19	0.40		0.54	0.76	0.51	0.65	0.55	0.55	1.83	0.00
Avail Cap(c_a), veh/h	284	553	469		146	553	469	146	526	534	146	0
HCM Platoon Ratio	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	28.2	21.7	17.3		29.0	21.3	19.8	28.5	18.3	18.3	28.2	0.0
Incr Delay (d2), s/veh	523.7	103.7	0.5		6.5	5.1	1.0	7.3	4.1	4.1	399.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	22.6	23.1	2.0		0.6	5.0	0.1	1.1	3.8	3.8	18.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	551.9	125.4	17.9		35.5	26.4	20.8	35.8	22.4	22.4	427.6	0.0
LnGrp LOS	F	F	B		D	C	C	D	C	C	F	
Approach Vol, veh/h		1453				600			648			407
Approach Delay, s/veh		289.8				25.1			23.7			287.2
Approach LOS		F				C			C			F
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.5	22.5	6.8	22.5	7.8	24.2	9.5	19.8				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	18.0	5.0	18.0	5.0	18.0	5.0	18.0				
Max Q Clear Time (g_c+I1), s	7.0	10.4	3.2	20.0	4.1	5.8	7.0	12.8				
Green Ext Time (p_c), s	0.0	2.1	0.0	0.0	0.0	0.5	0.0	1.4				

Intersection Summary												
HCM 7th Control Delay, s/veh			182.9									
HCM 7th LOS			F									

Notes
User approved ignoring U-Turning movement.



Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	104
Future Volume (veh/h)	104
Initial Q (Qb), veh	0
Lane Width Adj.	1.00
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1885
Adj Flow Rate, veh/h	107
Peak Hour Factor	0.97
Percent Heavy Veh, %	1
Cap, veh/h	410
Arrive On Green	0.32
Sat Flow, veh/h	1275
Grp Volume(v), veh/h	139
Grp Sat Flow(s),veh/h/ln	1656
Q Serve(g_s), s	3.8
Cycle Q Clear(g_c), s	3.8
Prop In Lane	0.77
Lane Grp Cap(c), veh/h	532
V/C Ratio(X)	0.26
Avail Cap(c_a), veh/h	532
HCM Platoon Ratio	1.00
Upstream Filter(l)	1.00
Uniform Delay (d), s/veh	15.4
Incr Delay (d2), s/veh	1.2
Initial Q Delay(d3), s/veh	0.0
%ile BackOfQ(50%),veh/ln	1.5
Unsig. Movement Delay, s/veh	
LnGrp Delay(d), s/veh	16.6
LnGrp LOS	B
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

HCM 7th Signalized Intersection Summary
 8: Citrus Plaza Dr & San Bernardino Ave

10/15/2025



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL
Lane Configurations		↔	↕	↗	↖	↗	↖		↔	↕	↗	↖
Traffic Volume (veh/h)	3	58	751	104	133	241	130	1	28	37	354	303
Future Volume (veh/h)	3	58	751	104	133	241	130	1	28	37	354	303
Initial Q (Qb), veh		0	0	0	0	0	0		0	0	0	0
Lane Width Adj.		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00		1.00	1.00		1.00		1.00		1.00	1.00
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach		No			No				No			
Adj Sat Flow, veh/h/ln		1885	1885	1885	1885	1885	1885		1885	1885	1885	1885
Adj Flow Rate, veh/h		59	766	106	136	246	133		29	38	361	309
Peak Hour Factor		0.98	0.98	0.98	0.98	0.98	0.98		0.98	0.98	0.98	0.98
Percent Heavy Veh, %		1	1	1	1	1	1		1	1	1	1
Cap, veh/h		92	937	418	144	548	464		57	545	590	144
Arrive On Green		0.05	0.26	0.26	0.08	0.29	0.29		0.03	0.29	0.29	0.08
Sat Flow, veh/h		1795	3582	1598	1795	1885	1598		1795	1885	1598	1795
Grp Volume(v), veh/h		59	766	106	136	246	133		29	38	361	309
Grp Sat Flow(s),veh/h/ln		1795	1791	1598	1795	1885	1598		1795	1885	1598	1795
Q Serve(g_s), s		2.0	12.5	3.3	4.7	6.6	4.0		1.0	0.9	11.5	5.0
Cycle Q Clear(g_c), s		2.0	12.5	3.3	4.7	6.6	4.0		1.0	0.9	11.5	5.0
Prop In Lane		1.00		1.00	1.00		1.00		1.00		1.00	1.00
Lane Grp Cap(c), veh/h		92	937	418	144	548	464		57	545	590	144
V/C Ratio(X)		0.64	0.82	0.25	0.94	0.45	0.29		0.51	0.07	0.61	2.14
Avail Cap(c_a), veh/h		144	1035	462	144	548	464		144	545	590	144
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00
Upstream Filter(I)		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh		29.0	21.6	18.2	28.5	18.0	17.1		29.7	16.1	16.0	28.6
Incr Delay (d2), s/veh		7.2	4.8	0.3	58.1	0.6	0.3		6.9	0.2	4.7	537.4
Initial Q Delay(d3), s/veh		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.0	5.4	1.2	4.2	2.7	1.4		0.5	0.4	4.5	23.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh		36.2	26.4	18.5	86.6	18.6	17.4		36.6	16.3	20.7	566.1
LnGrp LOS		D	C	B	F	B	B		D	B	C	F
Approach Vol, veh/h		931			515				428			
Approach Delay, s/veh		26.1			36.3				21.4			
Approach LOS		C			D				C			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.5	22.5	9.5	20.8	6.5	25.5	7.7	22.6				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	18.0	5.0	18.0	5.0	18.0	5.0	18.0				
Max Q Clear Time (g_c+I1), s	7.0	13.5	6.7	14.5	3.0	13.1	4.0	8.6				
Green Ext Time (p_c), s	0.0	0.7	0.0	1.8	0.0	2.0	0.0	1.3				

Intersection Summary												
HCM 7th Control Delay, s/veh			83.5									
HCM 7th LOS			F									

Notes
 User approved ignoring U-Turning movement.

HCM 7th Signalized Intersection Summary
 8: Citrus Plaza Dr & San Bernardino Ave

10/15/2025

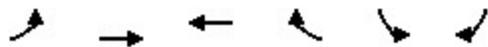


Movement	SBT	SBR
Lane Configurations	↑↑	
Traffic Volume (veh/h)	485	234
Future Volume (veh/h)	485	234
Initial Q (Qb), veh	0	0
Lane Width Adj.	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00
Parking Bus, Adj	1.00	1.00
Work Zone On Approach	No	
Adj Sat Flow, veh/h/ln	1885	1885
Adj Flow Rate, veh/h	495	239
Peak Hour Factor	0.98	0.98
Percent Heavy Veh, %	1	1
Cap, veh/h	792	380
Arrive On Green	0.34	0.34
Sat Flow, veh/h	2346	1127
Grp Volume(v), veh/h	377	357
Grp Sat Flow(s),veh/h/ln	1791	1682
Q Serve(g_s), s	11.0	11.1
Cycle Q Clear(g_c), s	11.0	11.1
Prop In Lane		0.67
Lane Grp Cap(c), veh/h	604	568
V/C Ratio(X)	0.62	0.63
Avail Cap(c_a), veh/h	604	568
HCM Platoon Ratio	1.00	1.00
Upstream Filter(l)	1.00	1.00
Uniform Delay (d), s/veh	17.3	17.3
Incr Delay (d2), s/veh	4.8	5.2
Initial Q Delay(d3), s/veh	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	4.7
Unsig. Movement Delay, s/veh		
LnGrp Delay(d), s/veh	22.1	22.5
LnGrp LOS	C	C
Approach Vol, veh/h	1043	
Approach Delay, s/veh	183.4	
Approach LOS	F	
Timer - Assigned Phs		

HCM 7th Signalized Intersection Summary

9: W Lugonia Ave & Citrus Plaza Dr

10/15/2025



Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations							
Traffic Volume (veh/h)	80	717	410	239	556	163	
Future Volume (veh/h)	80	717	410	239	556	163	
Initial Q (Qb), veh	0	0	0	0	0	0	
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	
Work Zone On Approach		No	No		No		
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	
Adj Flow Rate, veh/h	82	732	418	244	567	166	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	
Percent Heavy Veh, %	1	1	1	1	1	1	
Cap, veh/h	139	1783	651	376	896	411	
Arrive On Green	0.08	0.50	0.30	0.30	0.26	0.26	
Sat Flow, veh/h	1795	3676	2280	1263	3483	1598	
Grp Volume(v), veh/h	82	732	342	320	567	166	
Grp Sat Flow(s),veh/h/ln	1795	1791	1791	1658	1742	1598	
Q Serve(g_s), s	1.6	4.7	6.1	6.2	5.3	3.2	
Cycle Q Clear(g_c), s	1.6	4.7	6.1	6.2	5.3	3.2	
Prop In Lane	1.00			0.76	1.00	1.00	
Lane Grp Cap(c), veh/h	139	1783	534	494	896	411	
V/C Ratio(X)	0.59	0.41	0.64	0.65	0.63	0.40	
Avail Cap(c_a), veh/h	244	1783	878	812	1707	783	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	
Uniform Delay (d), s/veh	16.4	5.8	11.2	11.2	12.1	11.3	
Incr Delay (d2), s/veh	4.0	0.2	1.3	1.4	0.7	0.6	
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/ln	0.7	0.9	1.8	1.7	1.7	0.1	
Unsig. Movement Delay, s/veh							
LnGrp Delay(d), s/veh	20.4	6.0	12.5	12.7	12.8	11.9	
LnGrp LOS	C	A	B	B	B	B	
Approach Vol, veh/h		814	662		733		
Approach Delay, s/veh		7.4	12.6		12.6		
Approach LOS		A	B		B		
Timer - Assigned Phs				4	6	7	8
Phs Duration (G+Y+Rc), s				22.8	14.0	7.3	15.4
Change Period (Y+Rc), s				4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s				18.0	18.0	5.0	18.0
Max Q Clear Time (g_c+I1), s				6.7	7.3	3.6	8.2
Green Ext Time (p_c), s				3.6	2.2	0.0	2.8
Intersection Summary							
HCM 7th Control Delay, s/veh			10.7				
HCM 7th LOS			B				

HCM 7th Signalized Intersection Summary

10: Tennessee St & I-10 WB Ramps

10/15/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					←↑↑		↑	↑↑			↑↑	
Traffic Volume (veh/h)	0	0	0	126	5	206	244	781	0	0	579	94
Future Volume (veh/h)	0	0	0	126	5	206	244	781	0	0	579	94
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1885	1885	1885	1885	1885	0	0	1885	1885
Adj Flow Rate, veh/h				130	5	212	252	805	0	0	597	97
Peak Hour Factor				0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %				1	1	1	1	1	0	0	1	1
Cap, veh/h				343	13	316	197	2165	0	0	1221	198
Arrive On Green				0.20	0.20	0.20	0.11	0.60	0.00	0.00	0.40	0.40
Sat Flow, veh/h				1732	67	1598	1795	3676	0	0	3180	500
Grp Volume(v), veh/h				135	0	212	252	805	0	0	346	348
Grp Sat Flow(s),veh/h/ln				1799	0	1598	1795	1791	0	0	1791	1795
Q Serve(g_s), s				3.0	0.0	5.6	5.0	5.2	0.0	0.0	6.6	6.6
Cycle Q Clear(g_c), s				3.0	0.0	5.6	5.0	5.2	0.0	0.0	6.6	6.6
Prop In Lane				0.96		1.00	1.00		0.00	0.00		0.28
Lane Grp Cap(c), veh/h				356	0	316	197	2165	0	0	708	710
V/C Ratio(X)				0.38	0.00	0.67	1.28	0.37	0.00	0.00	0.49	0.49
Avail Cap(c_a), veh/h				712	0	632	197	2165	0	0	708	710
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				15.8	0.0	16.9	20.2	4.6	0.0	0.0	10.3	10.3
Incr Delay (d2), s/veh				0.7	0.0	2.5	158.0	0.5	0.0	0.0	2.4	2.4
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.1	0.0	2.0	10.5	1.2	0.0	0.0	2.5	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				16.5	0.0	19.3	178.2	5.1	0.0	0.0	12.7	12.7
LnGrp LOS				B		B	F	A			B	B
Approach Vol, veh/h					347			1057			694	
Approach Delay, s/veh					18.2			46.4			12.7	
Approach LOS					B			D			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		32.0			9.5	22.5		13.5				
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5				
Max Green Setting (Gmax), s		18.0			5.0	18.0		18.0				
Max Q Clear Time (g_c+I1), s		7.2			7.0	8.6		7.6				
Green Ext Time (p_c), s		4.1			0.0	3.0		1.5				
Intersection Summary												
HCM 7th Control Delay, s/veh					30.6							
HCM 7th LOS					C							

HCM 7th Signalized Intersection Summary

11: Tennessee St & I-10 EB Ramps

10/15/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔						↑	↗	↘	↕	↙
Traffic Volume (veh/h)	324	369	423	0	0	0	0	695	117	175	529	0
Future Volume (veh/h)	324	369	423	0	0	0	0	695	117	175	529	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885				0	1885	1885	1885	1885	0
Adj Flow Rate, veh/h	341	388	445				0	732	123	184	557	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1				0	1	1	1	1	0
Cap, veh/h	335	380	435				0	623	528	165	1807	0
Arrive On Green	0.33	0.33	0.33				0.00	0.33	0.33	0.09	0.50	0.00
Sat Flow, veh/h	1014	1152	1317				0	1885	1598	1795	3676	0
Grp Volume(v), veh/h	617	0	557				0	732	123	184	557	0
Grp Sat Flow(s),veh/h/ln	1835	0	1648				0	1885	1598	1795	1791	0
Q Serve(g_s), s	18.0	0.0	18.0				0.0	18.0	3.0	5.0	5.0	0.0
Cycle Q Clear(g_c), s	18.0	0.0	18.0				0.0	18.0	3.0	5.0	5.0	0.0
Prop In Lane	0.55		0.80				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	606	0	544				0	623	528	165	1807	0
V/C Ratio(X)	1.02	0.00	1.02				0.00	1.18	0.23	1.12	0.31	0.00
Avail Cap(c_a), veh/h	606	0	544				0	623	528	165	1807	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	18.3	0.0	18.3				0.0	18.3	13.2	24.8	7.9	0.0
Incr Delay (d2), s/veh	41.3	0.0	44.5				0.0	95.1	1.0	105.0	0.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.5	0.0	12.6				0.0	23.2	1.1	6.8	1.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.6	0.0	62.8				0.0	113.4	14.3	129.7	8.4	0.0
LnGrp LOS	F		F					F	B	F	A	
Approach Vol, veh/h		1174						855			741	
Approach Delay, s/veh		61.1						99.1			38.5	
Approach LOS		E						F			D	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	9.5	22.5		22.5		32.0						
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5						
Max Green Setting (Gmax), s	5.0	18.0		18.0		18.0						
Max Q Clear Time (g_c+I1), s	7.0	20.0		20.0		7.0						
Green Ext Time (p_c), s	0.0	0.0		0.0		2.8						
Intersection Summary												
HCM 7th Control Delay, s/veh			66.8									
HCM 7th LOS			E									

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	0	1069	472	30	0	10
Future Vol, veh/h	0	1069	472	30	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1162	513	33	0	11

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	273
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	725
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	725
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	10.04
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	725
HCM Lane V/C Ratio	-	-	-	0.015
HCM Ctrl Dly (s/v)	-	-	-	10
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Intersection Delay, s/veh	19.9
Intersection LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	14	37	381	368	35	17
Future Vol, veh/h	14	37	381	368	35	17
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	39	397	383	36	18
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	8.7	21.5	8.3
HCM LOS	A	C	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	27%	67%
Vol Thru, %	51%	0%	33%
Vol Right, %	49%	73%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	749	51	52
LT Vol	0	14	35
Through Vol	381	0	17
RT Vol	368	37	0
Lane Flow Rate	780	53	54
Geometry Grp	1	1	1
Degree of Util (X)	0.817	0.077	0.074
Departure Headway (Hd)	3.772	5.245	4.92
Convergence, Y/N	Yes	Yes	Yes
Cap	944	687	731
Service Time	1.855	3.248	2.929
HCM Lane V/C Ratio	0.826	0.077	0.074
HCM Control Delay, s/veh	21.5	8.7	8.3
HCM Lane LOS	C	A	A
HCM 95th-tile Q	9.3	0.2	0.2

Intersection	
Intersection Delay, s/veh	10.5
Intersection LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	14	67	405	13	35	38
Future Vol, veh/h	14	67	405	13	35	38
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	70	422	14	36	40
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	8.2	11.3	8.2
HCM LOS	A	B	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	17%	48%
Vol Thru, %	97%	0%	52%
Vol Right, %	3%	83%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	418	81	73
LT Vol	0	14	35
Through Vol	405	0	38
RT Vol	13	67	0
Lane Flow Rate	435	84	76
Geometry Grp	1	1	1
Degree of Util (X)	0.499	0.108	0.099
Departure Headway (Hd)	4.122	4.596	4.669
Convergence, Y/N	Yes	Yes	Yes
Cap	862	784	770
Service Time	2.215	2.602	2.682
HCM Lane V/C Ratio	0.505	0.107	0.099
HCM Control Delay, s/veh	11.3	8.2	8.2
HCM Lane LOS	B	A	A
HCM 95th-tile Q	2.8	0.4	0.3

Queues

1: Tennessee St & W Lugonia Ave

10/15/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	24	237	172	102	388	126	133	245	86	68	95	7
v/c Ratio	0.15	0.31	0.35	0.65	0.72	0.22	0.85	0.33	0.12	0.43	0.16	0.01
Control Delay (s/veh)	29.2	19.9	5.5	50.4	28.4	2.4	74.2	17.4	0.3	36.7	17.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	29.2	19.9	5.5	50.4	28.4	2.4	74.2	17.4	0.3	36.7	17.0	0.0
Queue Length 50th (ft)	8	37	0	34	106	0	45	62	0	22	22	0
Queue Length 95th (ft)	30	64	37	#114	#259	17	#152	141	0	#71	61	0
Internal Link Dist (ft)		395			313			229			186	
Turn Bay Length (ft)	135		85	100			200			100		
Base Capacity (vph)	157	1136	629	157	600	631	157	738	735	157	598	629
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.21	0.27	0.65	0.65	0.20	0.85	0.33	0.12	0.43	0.16	0.01

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Queues

2: HD Parking Lot & W Lugonia Ave

10/15/2025



Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	295	86	28	561	137
v/c Ratio	0.25	0.15	0.14	0.80	0.19
Control Delay (s/veh)	11.8	4.7	20.9	21.5	7.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	11.8	4.7	20.9	21.5	7.1
Queue Length 50th (ft)	25	0	7	120	13
Queue Length 95th (ft)	63	25	27	214	44
Internal Link Dist (ft)	313			655	125
Turn Bay Length (ft)			100		
Base Capacity (vph)	1445	696	200	1162	730
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.20	0.12	0.14	0.48	0.19

Intersection Summary

Queues

3: New York St & W Lugonia Ave

10/15/2025



Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	338	91	49	602	123
v/c Ratio	0.23	0.12	0.23	0.49	0.53
Control Delay (s/veh)	8.0	2.7	19.5	5.2	25.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	8.0	2.7	19.5	5.2	25.1
Queue Length 50th (ft)	24	0	11	51	23
Queue Length 95th (ft)	44	17	33	96	#74
Internal Link Dist (ft)	655			178	348
Turn Bay Length (ft)			100		
Base Capacity (vph)	1450	731	211	1222	230
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.23	0.12	0.23	0.49	0.53

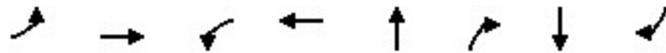
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Queues

4: Texas St & W Lugonia Ave

10/15/2025



Lane Group	EBL	EBT	WBL	WBT	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	29	304	141	495	213	69	306	61
v/c Ratio	0.15	0.40	0.75	0.37	0.34	0.10	0.44	0.09
Control Delay (s/veh)	22.7	14.2	50.3	11.9	13.2	1.5	14.0	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	22.7	14.2	50.3	11.9	13.2	1.5	14.0	1.1
Queue Length 50th (ft)	7	31	37	44	37	0	55	0
Queue Length 95th (ft)	29	56	#135	101	103	9	143	6
Internal Link Dist (ft)		338		2549	281		259	
Turn Bay Length (ft)	105		100			40		50
Base Capacity (vph)	189	1361	189	1383	618	684	698	684
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.22	0.75	0.36	0.34	0.10	0.44	0.09

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Queues

5: Orange St & E Lugonia Ave

10/15/2025



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	42	253	144	539	163	34	220	59	78	310	48
v/c Ratio	0.28	0.30	0.95	0.94	0.27	0.23	0.38	0.10	0.52	0.45	0.07
Control Delay (s/veh)	32.7	15.8	98.4	51.0	4.2	31.5	20.2	0.3	42.7	18.8	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	32.7	15.8	98.4	51.0	4.2	31.5	20.2	0.3	42.7	18.8	0.2
Queue Length 50th (ft)	16	33	~66	~243	0	13	72	0	31	82	0
Queue Length 95th (ft)	45	60	#168	#418	34	38	130	0	#86	184	0
Internal Link Dist (ft)		2549		332			188			310	
Turn Bay Length (ft)	80		250		250	60		60	250		50
Base Capacity (vph)	151	1092	151	574	611	151	574	611	151	692	700
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.23	0.95	0.94	0.27	0.23	0.38	0.10	0.52	0.45	0.07

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

6: Texas St & San Bernardino Ave

10/15/2025



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	125	372	55	613	207	254	67	201	170
v/c Ratio	0.78	0.51	0.34	1.01	0.33	0.46	0.19	0.33	0.20
Control Delay (s/veh)	60.4	16.6	29.6	60.7	5.8	16.9	15.0	15.6	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	60.4	16.6	29.6	60.7	5.8	16.9	15.0	15.6	4.5
Queue Length 50th (ft)	42	99	18	~201	9	61	16	49	12
Queue Length 95th (ft)	#118	173	46	#385	46	116	40	93	37
Internal Link Dist (ft)		2433		252		199		201	
Turn Bay Length (ft)	100		100		100		210		105
Base Capacity (vph)	160	734	160	609	629	556	344	609	837
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.78	0.51	0.34	1.01	0.33	0.46	0.19	0.33	0.20

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

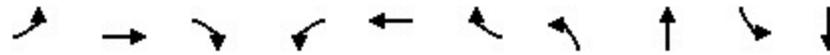
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

7: Tennessee St & San Bernardino Ave

10/15/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	197	464	138	35	524	359	34	341	216	141
v/c Ratio	0.74	0.68	0.20	0.26	1.01	0.51	0.25	0.35	1.59	0.21
Control Delay (s/veh)	48.2	26.7	2.6	32.8	69.2	5.4	32.6	18.9	323.3	6.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	48.2	26.7	2.6	32.8	69.2	5.4	32.6	18.9	323.3	6.0
Queue Length 50th (ft)	40	135	0	13	~211	0	13	54	~126	4
Queue Length 95th (ft)	#88	#340	23	39	#398	56	38	87	#247	42
Internal Link Dist (ft)		618			2433			229		142
Turn Bay Length (ft)	275			140		165	100		120	
Base Capacity (vph)	265	682	693	136	518	699	136	983	136	671
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.74	0.68	0.20	0.26	1.01	0.51	0.25	0.35	1.59	0.21

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

8: Citrus Plaza Dr & San Bernardino Ave

10/15/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	68	369	29	57	340	333	9	6	42	453	854
v/c Ratio	0.43	0.36	0.05	0.38	0.72	0.51	0.06	0.01	0.05	3.04	0.51
Control Delay (s/veh)	37.4	18.6	0.2	35.9	30.0	5.7	28.4	16.8	0.2	955.5	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	37.4	18.6	0.2	35.9	30.0	5.7	28.4	16.8	0.2	955.5	7.6
Queue Length 50th (ft)	27	61	0	22	119	0	3	2	0	~328	47
Queue Length 95th (ft)	#67	95	0	55	198	52	16	9	2	#486	118
Internal Link Dist (ft)		331			618			252			253
Turn Bay Length (ft)	260		200	160		120	230		150	70	
Base Capacity (vph)	157	1146	633	149	565	712	149	565	789	149	1680
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.32	0.05	0.38	0.60	0.47	0.06	0.01	0.05	3.04	0.51

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

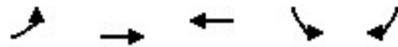
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

9: W Lugonia Ave & Citrus Plaza Dr

10/15/2025



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	17	213	556	259	90
v/c Ratio	0.08	0.19	0.54	0.17	0.12
Control Delay (s/veh)	20.1	9.5	13.4	8.8	3.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.1	9.5	13.4	8.8	3.8
Queue Length 50th (ft)	3	17	46	14	0
Queue Length 95th (ft)	21	32	105	54	24
Internal Link Dist (ft)		164	302	366	
Turn Bay Length (ft)	140			210	
Base Capacity (vph)	222	2441	1582	1550	764
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.08	0.09	0.35	0.17	0.12

Intersection Summary

Queues

10: Tennessee St & I-10 WB Ramps

10/15/2025



Lane Group	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	292	233	458	441
v/c Ratio	0.43	1.17	0.21	0.31
Control Delay (s/veh)	11.7	145.9	4.3	8.5
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	11.7	145.9	4.3	8.5
Queue Length 50th (ft)	20	~76	21	30
Queue Length 95th (ft)	46	#195	45	63
Internal Link Dist (ft)	94		153	172
Turn Bay Length (ft)		100		
Base Capacity (vph)	1379	199	2190	1429
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.21	1.17	0.21	0.31

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

11: Tennessee St & I-10 EB Ramps

10/15/2025



Lane Group	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	775	590	152	98	446
v/c Ratio	0.67	0.83	0.22	0.53	0.24
Control Delay (s/veh)	11.4	30.5	4.0	36.8	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	11.4	30.5	4.0	36.8	7.2
Queue Length 50th (ft)	56	167	0	30	34
Queue Length 95th (ft)	105	#363	32	#90	62
Internal Link Dist (ft)	125	202			282
Turn Bay Length (ft)					
Base Capacity (vph)	1427	712	688	186	2067
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.54	0.83	0.22	0.53	0.22

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Queues

1: Tennessee St & W Lugonia Ave

10/15/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	77	801	436	87	376	139	274	345	279	101	107	23
v/c Ratio	0.53	0.79	0.62	0.60	0.71	0.24	1.88	0.55	0.40	0.69	0.19	0.04
Control Delay (s/veh)	43.6	28.1	8.9	48.3	29.3	3.0	443.2	23.4	6.2	56.5	18.8	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	43.6	28.1	8.9	48.3	29.3	3.0	443.2	23.4	6.2	56.5	18.8	0.1
Queue Length 50th (ft)	30	152	24	34	131	0	~172	118	10	40	32	0
Queue Length 95th (ft)	#82	#223	100	#94	#243	23	#303	200	61	#112	67	0
Internal Link Dist (ft)		395			313			229				186
Turn Bay Length (ft)	135		85	100			200			100		
Base Capacity (vph)	146	1056	723	146	556	598	146	626	695	146	556	598
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.76	0.60	0.60	0.68	0.23	1.88	0.55	0.40	0.69	0.19	0.04

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

2: HD Parking Lot & W Lugonia Ave

10/15/2025



Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	1114	101	42	550	179
v/c Ratio	0.84	0.15	0.23	0.66	0.26
Control Delay (s/veh)	23.7	4.3	25.3	15.0	8.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	23.7	4.3	25.3	15.0	8.1
Queue Length 50th (ft)	125	0	10	115	14
Queue Length 95th (ft)	#303	26	38	195	58
Internal Link Dist (ft)	313			655	125
Turn Bay Length (ft)			100		
Base Capacity (vph)	1329	658	184	1069	692
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.84	0.15	0.23	0.51	0.26

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Queues

3: New York St & W Lugonia Ave

10/15/2025



Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	1056	233	28	425	237
v/c Ratio	0.68	0.28	0.13	0.34	1.00
Control Delay (s/veh)	12.2	2.5	17.9	4.0	84.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.2	2.5	17.9	4.0	84.7
Queue Length 50th (ft)	96	0	6	31	~51
Queue Length 95th (ft)	148	26	22	58	#160
Internal Link Dist (ft)	655			178	348
Turn Bay Length (ft)			100		
Base Capacity (vph)	1550	825	215	1246	236
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.68	0.28	0.13	0.34	1.00

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

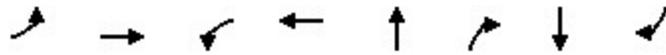
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

4: Texas St & W Lugonia Ave

10/15/2025



Lane Group	EBL	EBT	WBL	WBT	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	62	948	66	326	351	95	220	41
v/c Ratio	0.34	0.78	0.36	0.27	0.58	0.14	0.33	0.06
Control Delay (s/veh)	28.4	20.9	28.9	12.8	19.2	3.0	14.9	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	28.4	20.9	28.9	12.8	19.2	3.0	14.9	0.2
Queue Length 50th (ft)	20	140	21	38	96	0	54	0
Queue Length 95th (ft)	50	#218	53	64	#175	19	102	0
Internal Link Dist (ft)		338		2549	281		259	
Turn Bay Length (ft)	105		100			40		50
Base Capacity (vph)	183	1320	183	1321	604	668	663	668
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.72	0.36	0.25	0.58	0.14	0.33	0.06

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Queues

5: Orange St & E Lugonia Ave

10/15/2025



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	49	826	79	299	70	60	347	91	112	315	58
v/c Ratio	0.33	0.83	0.54	0.51	0.11	0.41	0.62	0.15	0.76	0.46	0.08
Control Delay (s/veh)	34.6	28.8	44.3	22.2	0.4	37.0	25.6	0.7	65.0	20.7	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	34.6	28.8	44.3	22.2	0.4	37.0	25.6	0.7	65.0	20.7	0.2
Queue Length 50th (ft)	19	151	31	100	0	23	119	0	44	106	0
Queue Length 95th (ft)	49	#242	#84	171	0	#57	201	3	#125	181	0
Internal Link Dist (ft)		2549		332			188			310	
Turn Bay Length (ft)	80		250		250	60		60	250		50
Base Capacity (vph)	147	1059	147	614	642	147	558	600	147	685	696
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.78	0.54	0.49	0.11	0.41	0.62	0.15	0.76	0.46	0.08

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Queues

6: Texas St & San Bernardino Ave

10/15/2025



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	57	725	31	349	35	285	33	152	60
v/c Ratio	0.32	1.00	0.17	0.53	0.06	0.48	0.09	0.22	0.07
Control Delay (s/veh)	27.7	56.4	25.0	17.9	0.2	15.6	13.1	13.5	2.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	27.7	56.4	25.0	17.9	0.2	15.6	13.1	13.5	2.6
Queue Length 50th (ft)	16	172	9	92	0	58	6	31	0
Queue Length 95th (ft)	47	#480	31	161	0	129	23	72	14
Internal Link Dist (ft)		2433		252		199		201	
Turn Bay Length (ft)	100		100		100		210		105
Base Capacity (vph)	179	722	179	682	656	598	384	682	913
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	1.00	0.17	0.51	0.05	0.48	0.09	0.22	0.07

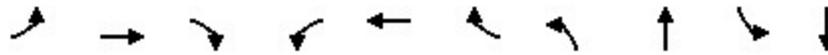
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Queues

7: Tennessee St & San Bernardino Ave

10/15/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	607	629	186	38	327	205	30	540	268	129
v/c Ratio	2.14	0.98	0.28	0.25	0.71	0.38	0.21	0.51	1.84	0.18
Control Delay (s/veh)	544.4	56.6	4.6	31.8	30.2	5.4	31.1	20.3	424.2	6.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	544.4	56.6	4.6	31.8	30.2	5.4	31.1	20.3	424.2	6.4
Queue Length 50th (ft)	~198	202	0	14	111	0	11	89	~162	5
Queue Length 95th (ft)	#296	#487	41	41	188	43	34	136	#297	41
Internal Link Dist (ft)		618			2433			229		142
Turn Bay Length (ft)	275			140		165	100		120	
Base Capacity (vph)	284	642	668	154	555	617	146	1053	146	711
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	2.14	0.98	0.28	0.25	0.59	0.33	0.21	0.51	1.84	0.18

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

8: Citrus Plaza Dr & San Bernardino Ave

10/15/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	62	756	106	114	235	133	30	38	341	309	734
v/c Ratio	0.42	0.78	0.19	0.81	0.37	0.20	0.20	0.07	0.45	2.19	0.54
Control Delay (s/veh)	37.2	27.7	1.6	72.0	19.7	2.4	31.2	17.4	11.1	581.1	15.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	37.2	27.7	1.6	72.0	19.7	2.4	31.2	17.4	11.1	581.1	15.7
Queue Length 50th (ft)	24	141	0	45	75	0	11	11	60	~201	83
Queue Length 95th (ft)	57	200	9	#127	134	20	34	31	123	#339	167
Internal Link Dist (ft)		331			618			252			253
Turn Bay Length (ft)	260		200	160		120	230		150	70	
Base Capacity (vph)	148	1017	583	141	627	652	148	535	753	141	1355
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.74	0.18	0.81	0.37	0.20	0.20	0.07	0.45	2.19	0.54

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

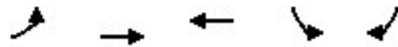
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

9: W Lugonia Ave & Citrus Plaza Dr

10/15/2025



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	82	711	641	567	166
v/c Ratio	0.41	0.50	0.56	0.41	0.22
Control Delay (s/veh)	29.8	11.0	10.8	12.8	3.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	29.8	11.0	10.8	12.8	3.8
Queue Length 50th (ft)	23	68	50	60	0
Queue Length 95th (ft)	#72	101	89	113	32
Internal Link Dist (ft)		164	302	366	
Turn Bay Length (ft)	140			210	
Base Capacity (vph)	198	2184	1494	1386	739
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.41	0.33	0.43	0.41	0.22

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Queues

10: Tennessee St & I-10 WB Ramps

10/15/2025



Lane Group	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	327	252	774	638
v/c Ratio	0.47	1.26	0.35	0.45
Control Delay (s/veh)	11.3	178.5	5.1	10.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	11.3	178.5	5.1	10.9
Queue Length 50th (ft)	21	~86	40	55
Queue Length 95th (ft)	48	#209	81	103
Internal Link Dist (ft)	94		153	172
Turn Bay Length (ft)		100		
Base Capacity (vph)	1376	200	2202	1432
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.24	1.26	0.35	0.45

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

11: Tennessee St & I-10 EB Ramps

10/15/2025



Lane Group	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	1153	721	123	162	545
v/c Ratio	0.90	1.16	0.20	0.99	0.30
Control Delay (s/veh)	25.7	111.8	4.2	101.5	8.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	25.7	111.8	4.2	101.5	8.5
Queue Length 50th (ft)	143	~290	0	54	49
Queue Length 95th (ft)	#267	#468	28	#154	76
Internal Link Dist (ft)	125	202			282
Turn Bay Length (ft)					
Base Capacity (vph)	1276	621	610	163	1803
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.90	1.16	0.20	0.99	0.30

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

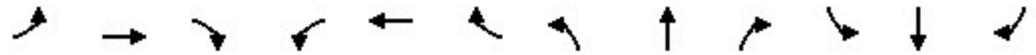
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

1: Tennessee St & W Lugonia Ave

10/15/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	24	253	172	116	399	126	133	264	105	68	109	7
v/c Ratio	0.16	0.35	0.37	0.76	0.70	0.21	0.87	0.37	0.15	0.44	0.19	0.01
Control Delay (s/veh)	29.3	20.7	5.7	62.1	27.2	2.3	78.7	18.0	1.2	37.3	17.3	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	29.3	20.7	5.7	62.1	27.2	2.3	78.7	18.0	1.2	37.3	17.3	0.0
Queue Length 50th (ft)	8	40	0	39	109	0	45	68	0	22	25	0
Queue Length 95th (ft)	30	67	37	#131	#270	17	#152	152	8	#71	68	0
Internal Link Dist (ft)		395			313			229			186	
Turn Bay Length (ft)	135		85	100			200			100		
Base Capacity (vph)	153	1105	617	153	586	620	153	713	716	153	581	617
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.23	0.28	0.76	0.68	0.20	0.87	0.37	0.15	0.44	0.19	0.01

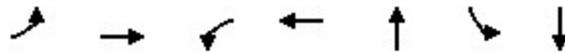
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Queues

2: HD Parking Lot/Project Driveway 2 & W Lugonia Ave

10/15/2025



Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBT
Lane Group Flow (vph)	36	381	28	589	137	35	26
v/c Ratio	0.29	0.38	0.19	0.92	0.22	0.23	0.05
Control Delay (s/veh)	26.8	17.3	31.3	40.9	4.6	29.0	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	26.8	17.3	31.3	40.9	4.6	29.0	0.2
Queue Length 50th (ft)	9	45	9	~201	0	11	0
Queue Length 95th (ft)	40	101	36	#393	34	39	0
Internal Link Dist (ft)		313		106	125		40
Turn Bay Length (ft)							
Base Capacity (vph)	131	1058	147	850	616	373	741
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.36	0.19	0.69	0.22	0.09	0.04

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

3: New York St & W Lugonia Ave

10/15/2025



Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	375	91	49	651	123
v/c Ratio	0.26	0.12	0.23	0.53	0.53
Control Delay (s/veh)	8.1	2.7	19.5	5.6	25.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	8.1	2.7	19.5	5.6	25.1
Queue Length 50th (ft)	27	0	11	58	23
Queue Length 95th (ft)	48	17	33	109	#74
Internal Link Dist (ft)	294			178	348
Turn Bay Length (ft)			100		
Base Capacity (vph)	1450	731	211	1222	230
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.26	0.12	0.23	0.53	0.53

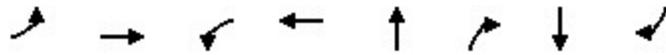
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Queues

4: Texas St & W Lugonia Ave

10/15/2025



Lane Group	EBL	EBT	WBL	WBT	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	29	340	141	533	220	69	306	61
v/c Ratio	0.16	0.44	0.75	0.40	0.37	0.10	0.43	0.09
Control Delay (s/veh)	23.0	14.8	50.5	12.0	13.8	1.5	14.1	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	23.0	14.8	50.5	12.0	13.8	1.5	14.1	1.1
Queue Length 50th (ft)	7	36	38	48	40	0	56	0
Queue Length 95th (ft)	30	64	#135	110	108	9	141	6
Internal Link Dist (ft)		338		2549	281		259	
Turn Bay Length (ft)	105		100			40		50
Base Capacity (vph)	186	1330	189	1385	595	684	705	684
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.26	0.75	0.38	0.37	0.10	0.43	0.09

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Queues

5: Orange St & E Lugonia Ave

10/15/2025



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	48	276	144	561	163	42	220	59	78	310	55
v/c Ratio	0.32	0.33	0.95	0.98	0.27	0.28	0.38	0.10	0.52	0.49	0.08
Control Delay (s/veh)	33.7	16.2	98.4	58.9	4.2	32.7	20.2	0.3	42.7	20.9	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	33.7	16.2	98.4	58.9	4.2	32.7	20.2	0.3	42.7	20.9	0.2
Queue Length 50th (ft)	19	36	~66	~262	0	16	72	0	31	107	0
Queue Length 95th (ft)	49	65	#168	#440	34	45	130	0	#86	184	0
Internal Link Dist (ft)		2549		332			188			310	
Turn Bay Length (ft)	80		250		250	60		60	250		50
Base Capacity (vph)	151	1092	151	574	611	151	574	611	151	638	659
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.25	0.95	0.98	0.27	0.28	0.38	0.10	0.52	0.49	0.08

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

6: Texas St & San Bernardino Ave

10/15/2025



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	131	386	55	621	207	262	67	201	178
v/c Ratio	0.82	0.53	0.34	1.02	0.33	0.48	0.20	0.33	0.21
Control Delay (s/veh)	65.8	16.9	29.6	64.1	5.9	17.4	15.0	15.6	4.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	65.8	16.9	29.6	64.1	5.9	17.4	15.0	15.6	4.7
Queue Length 50th (ft)	44	103	18	~209	10	64	16	49	14
Queue Length 95th (ft)	#124	181	46	#391	47	120	40	93	40
Internal Link Dist (ft)		2433		252		199		201	
Turn Bay Length (ft)	100		100		100		210		105
Base Capacity (vph)	160	733	160	609	627	547	340	609	835
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.82	0.53	0.34	1.02	0.33	0.48	0.20	0.33	0.21

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

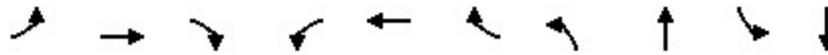
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

7: Tennessee St & San Bernardino Ave

10/15/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	197	486	138	35	547	359	52	365	216	148
v/c Ratio	0.74	0.71	0.20	0.26	1.06	0.52	0.38	0.37	1.59	0.23
Control Delay (s/veh)	48.2	28.2	2.6	32.8	81.6	5.5	36.6	18.7	323.3	6.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	48.2	28.2	2.6	32.8	81.6	5.5	36.6	18.7	323.3	6.7
Queue Length 50th (ft)	40	143	0	13	~246	1	20	57	~126	8
Queue Length 95th (ft)	#88	#361	23	39	#421	57	52	92	#247	46
Internal Link Dist (ft)		618			2433			229		142
Turn Bay Length (ft)	275			140		165	100		120	
Base Capacity (vph)	265	682	693	136	518	697	136	985	136	630
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.74	0.71	0.20	0.26	1.06	0.52	0.38	0.37	1.59	0.23

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

8: Citrus Plaza Dr & San Bernardino Ave

10/15/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	68	376	29	70	347	333	9	6	58	453	854
v/c Ratio	0.43	0.41	0.05	0.47	0.73	0.51	0.06	0.01	0.07	3.06	0.51
Control Delay (s/veh)	37.5	20.2	0.2	40.3	30.6	5.7	28.4	16.8	1.2	959.2	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	37.5	20.2	0.2	40.3	30.6	5.7	28.4	16.8	1.2	959.2	7.6
Queue Length 50th (ft)	27	63	0	28	122	0	3	2	0	~328	47
Queue Length 95th (ft)	#67	97	0	#73	203	52	16	9	7	#486	118
Internal Link Dist (ft)		331			618			252			253
Turn Bay Length (ft)	260		200	160		120	230		150	70	
Base Capacity (vph)	157	1073	604	148	564	711	148	564	787	148	1677
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.35	0.05	0.47	0.62	0.47	0.06	0.01	0.07	3.06	0.51

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

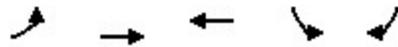
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

9: W Lugonia Ave & Citrus Plaza Dr

10/15/2025



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	17	230	570	259	90
v/c Ratio	0.08	0.20	0.57	0.17	0.12
Control Delay (s/veh)	20.3	9.5	13.8	9.0	3.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.3	9.5	13.8	9.0	3.8
Queue Length 50th (ft)	3	18	47	15	0
Queue Length 95th (ft)	21	34	110	54	24
Internal Link Dist (ft)		164	302	366	
Turn Bay Length (ft)	140			210	
Base Capacity (vph)	220	2420	1499	1536	758
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.08	0.10	0.38	0.17	0.12

Intersection Summary

Queues

10: Tennessee St & I-10 WB Ramps

10/15/2025



Lane Group	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	307	233	481	469
v/c Ratio	0.45	1.18	0.22	0.33
Control Delay (s/veh)	11.3	146.9	4.4	8.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	11.3	146.9	4.4	8.6
Queue Length 50th (ft)	20	~76	22	33
Queue Length 95th (ft)	46	#194	47	67
Internal Link Dist (ft)	94		153	172
Turn Bay Length (ft)		100		
Base Capacity (vph)	1382	198	2187	1428
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.22	1.18	0.22	0.33

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

11: Tennessee St & I-10 EB Ramps

10/15/2025



Lane Group	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	791	598	152	110	453
v/c Ratio	0.67	0.85	0.22	0.59	0.25
Control Delay (s/veh)	11.8	32.7	4.0	40.8	7.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	11.8	32.7	4.0	40.8	7.3
Queue Length 50th (ft)	59	175	0	34	36
Queue Length 95th (ft)	107	#375	31	#103	63
Internal Link Dist (ft)	125	202			282
Turn Bay Length (ft)					
Base Capacity (vph)	1428	702	691	185	2038
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.55	0.85	0.22	0.59	0.22

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Queues

1: Tennessee St & W Lugonia Ave

10/15/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	77	821	436	113	397	139	274	372	303	101	135	23
v/c Ratio	0.55	0.83	0.63	0.81	0.68	0.23	1.96	0.63	0.45	0.72	0.25	0.04
Control Delay (s/veh)	45.4	30.3	9.3	72.1	28.3	2.8	481.0	26.1	7.4	60.5	19.4	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	45.4	30.3	9.3	72.1	28.3	2.8	481.0	26.1	7.4	60.5	19.4	0.1
Queue Length 50th (ft)	30	157	26	45	141	0	~172	130	17	40	41	0
Queue Length 95th (ft)	#82	#245	103	#126	#264	23	#303	#239	74	#112	81	0
Internal Link Dist (ft)		395			313			229				186
Turn Bay Length (ft)	135		85	100			200			100		
Base Capacity (vph)	140	1009	701	140	580	617	140	588	668	140	531	580
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.81	0.62	0.81	0.68	0.23	1.96	0.63	0.45	0.72	0.25	0.04

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

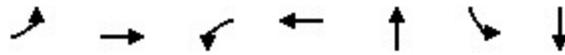
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

2: HD Parking Lot/Project Driveway 2 & W Lugonia Ave

10/15/2025



Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBT
Lane Group Flow (vph)	46	1215	42	591	179	67	171
v/c Ratio	0.35	1.21	0.30	0.87	0.30	0.40	0.32
Control Delay (s/veh)	30.8	127.4	36.8	34.3	7.7	33.5	1.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	30.8	127.4	36.8	34.3	7.7	33.5	1.5
Queue Length 50th (ft)	16	~353	17	208	9	26	0
Queue Length 95th (ft)	51	#517	48	#413	57	62	0
Internal Link Dist (ft)		313		107	125		85
Turn Bay Length (ft)							
Base Capacity (vph)	130	1008	140	809	591	343	716
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.35	1.21	0.30	0.73	0.30	0.20	0.24

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

3: New York St & W Lugonia Ave

10/15/2025



Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	1122	233	28	487	237
v/c Ratio	0.72	0.28	0.13	0.39	1.00
Control Delay (s/veh)	13.1	2.5	17.9	4.3	84.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	13.1	2.5	17.9	4.3	84.7
Queue Length 50th (ft)	105	0	6	37	~51
Queue Length 95th (ft)	162	26	22	69	#160
Internal Link Dist (ft)	309			178	348
Turn Bay Length (ft)			100		
Base Capacity (vph)	1550	825	215	1246	236
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.72	0.28	0.13	0.39	1.00

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

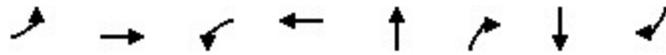
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

4: Texas St & W Lugonia Ave

10/15/2025



Lane Group	EBL	EBT	WBL	WBT	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	62	1014	66	377	361	95	220	41
v/c Ratio	0.34	0.82	0.36	0.31	0.62	0.14	0.34	0.06
Control Delay (s/veh)	28.6	22.8	29.2	13.1	20.7	3.0	15.0	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	28.6	22.8	29.2	13.1	20.7	3.0	15.0	0.2
Queue Length 50th (ft)	20	154	21	45	100	0	54	0
Queue Length 95th (ft)	50	#260	53	74	#205	19	102	0
Internal Link Dist (ft)		338		2549	281		259	
Turn Bay Length (ft)	105		100			40		50
Base Capacity (vph)	181	1303	181	1304	586	661	653	661
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.78	0.36	0.29	0.62	0.14	0.34	0.06

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Queues

5: Orange St & E Lugonia Ave

10/15/2025



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	60	869	79	330	70	70	347	91	112	315	68
v/c Ratio	0.41	0.86	0.54	0.56	0.11	0.48	0.63	0.15	0.77	0.46	0.10
Control Delay (s/veh)	37.1	31.2	44.5	23.1	0.4	40.7	25.7	0.7	65.5	20.7	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	37.1	31.2	44.5	23.1	0.4	40.7	25.7	0.7	65.5	20.7	0.3
Queue Length 50th (ft)	23	162	31	112	0	27	119	0	44	106	0
Queue Length 95th (ft)	#57	#263	#84	190	0	#72	201	3	#125	181	0
Internal Link Dist (ft)		2549		332			188			310	
Turn Bay Length (ft)	80		250		250	60		60	250		50
Base Capacity (vph)	146	1054	146	611	640	146	555	598	146	681	693
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.82	0.54	0.54	0.11	0.48	0.63	0.15	0.77	0.46	0.10

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Queues

6: Texas St & San Bernardino Ave

10/15/2025



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	69	748	31	359	35	296	33	152	71
v/c Ratio	0.39	1.01	0.18	0.60	0.06	0.51	0.09	0.23	0.08
Control Delay (s/veh)	29.8	58.3	25.1	20.2	0.2	16.6	13.2	13.8	2.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	29.8	58.3	25.1	20.2	0.2	16.6	13.2	13.8	2.5
Queue Length 50th (ft)	20	181	9	95	0	62	6	31	0
Queue Length 95th (ft)	54	#499	31	166	0	136	23	72	15
Internal Link Dist (ft)		2433		252		199		201	
Turn Bay Length (ft)	100		100		100		210		105
Base Capacity (vph)	176	738	176	670	647	578	369	670	903
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.39	1.01	0.18	0.54	0.05	0.51	0.09	0.23	0.08

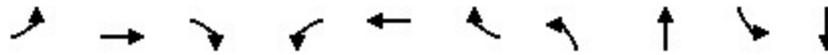
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Queues

7: Tennessee St & San Bernardino Ave

10/15/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	607	660	186	38	358	205	63	585	268	139
v/c Ratio	2.16	1.01	0.27	0.25	0.75	0.37	0.44	0.56	1.86	0.21
Control Delay (s/veh)	555.3	63.4	4.6	32.0	32.2	5.3	37.9	20.9	434.3	7.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	555.3	63.4	4.6	32.0	32.2	5.3	37.9	20.9	434.3	7.3
Queue Length 50th (ft)	~204	217	0	14	124	0	24	99	~167	9
Queue Length 95th (ft)	#296	#517	41	41	#210	43	#63	147	#297	46
Internal Link Dist (ft)		618			2433			229		142
Turn Bay Length (ft)	275			140		165	100		120	
Base Capacity (vph)	281	654	677	152	550	612	144	1042	144	663
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	2.16	1.01	0.27	0.25	0.65	0.33	0.44	0.56	1.86	0.21

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

8: Citrus Plaza Dr & San Bernardino Ave

10/15/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	62	766	106	136	246	133	30	38	361	309	734
v/c Ratio	0.42	0.79	0.19	0.96	0.39	0.20	0.20	0.07	0.48	2.19	0.54
Control Delay (s/veh)	37.2	28.1	1.6	103.7	20.0	2.4	31.2	17.4	11.7	582.5	15.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	37.2	28.1	1.6	103.7	20.0	2.4	31.2	17.4	11.7	582.5	15.7
Queue Length 50th (ft)	24	143	0	55	79	0	11	11	66	~201	83
Queue Length 95th (ft)	57	203	9	#153	140	20	34	31	133	#339	167
Internal Link Dist (ft)		331			618			252			253
Turn Bay Length (ft)	260		200	160		120	230		150	70	
Base Capacity (vph)	148	1017	583	141	628	653	148	535	752	141	1354
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.75	0.18	0.96	0.39	0.20	0.20	0.07	0.48	2.19	0.54

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

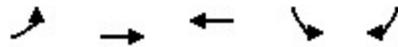
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

9: W Lugonia Ave & Citrus Plaza Dr

10/15/2025



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	82	732	662	567	166
v/c Ratio	0.42	0.51	0.57	0.41	0.23
Control Delay (s/veh)	30.0	11.1	11.4	12.9	3.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	30.0	11.1	11.4	12.9	3.8
Queue Length 50th (ft)	23	71	55	61	0
Queue Length 95th (ft)	#72	105	96	113	32
Internal Link Dist (ft)		164	302	366	
Turn Bay Length (ft)	140			210	
Base Capacity (vph)	197	2171	1482	1378	735
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.42	0.34	0.45	0.41	0.23

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Queues

10: Tennessee St & I-10 WB Ramps

10/15/2025



Lane Group	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	347	252	805	694
v/c Ratio	0.49	1.28	0.37	0.49
Control Delay (s/veh)	12.1	184.3	5.4	11.5
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.1	184.3	5.4	11.5
Queue Length 50th (ft)	25	~87	43	62
Queue Length 95th (ft)	53	#212	88	116
Internal Link Dist (ft)	94		153	172
Turn Bay Length (ft)		100		
Base Capacity (vph)	1352	197	2179	1418
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.26	1.28	0.37	0.49

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

11: Tennessee St & I-10 EB Ramps

10/15/2025



Lane Group	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	1174	732	123	184	557
v/c Ratio	0.93	1.18	0.20	1.13	0.31
Control Delay (s/veh)	28.7	118.7	4.2	140.0	8.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	28.7	118.7	4.2	140.0	8.5
Queue Length 50th (ft)	151	~298	0	~72	51
Queue Length 95th (ft)	#280	#477	28	#175	77
Internal Link Dist (ft)	125	202			282
Turn Bay Length (ft)					
Base Capacity (vph)	1267	621	610	163	1803
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.93	1.18	0.20	1.13	0.31

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.