

APPENDIX 9.11

TRANSPORTATION REPORTS

APPENDIX 9.11.1

TRAFFIC IMPACT ANALYSIS



MENIFEE COMMERCE CENTER PROJECT TRAFFIC IMPACT ANALYSIS

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August 2021



August 12, 2021

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RE: Traffic Impact Analysis Report for Proposed Menifee Commerce Center Industrial Development in the City of Menifee

Dear Jon,

We are pleased to submit our Traffic Impact Analysis report for the proposed Menifee Commerce Center project, which we have prepared at your request. The analysis and report have been prepared in accordance with the City of Menifee General Plan and Traffic Impact Analysis Guidelines as well as a scope of study previously approved by the City.

If you have any questions regarding this report, please call the undersigned for clarification.

Sincerely,

ALBERT A. WEBB ASSOCIATES



Nicholas Lowe, PE
Senior Engineer

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I. EXECUTIVE SUMMARY

Study Objectives

This study evaluates the potential effects on traffic circulation from a proposed industrial development south of Ethanac Road between Trumble Road and Dawson Road in the City of Menifee. The study objectives include:

- Document or extrapolate existing traffic conditions (2021) in the vicinity of the proposed development (study area);
- Determine appropriate traffic volume adjustment factor to account for current atypical conditions;
- Determine the expected project traffic generation;
- Evaluate opening-day traffic scenarios for roadway and intersection levels of service (LOS), including ambient growth and cumulative projects;
- Determine if the LOS required by the City of Menifee, City of Perris, and California Department of Transportation (Caltrans) will be maintained within the study area, and
 - if not, determine the mitigation measures needed to maintain the required LOS; and
- Determine if peak-hour traffic signal warrants are met for any unsignalized study intersections.

Prior to preparing this study, the City of Menifee and City of Perris were solicited for input on and approval of the study scope (**Appendix A**).

Project Description

The project proposes to construct two new warehouses totaling approximately 1.6 million square feet within several currently-vacant parcels south of Ethanac Road between Trumble Road, Sherman Road, and Dawson Road. The proposed project site encompasses approximately 72 acres currently zoned for specific plan commercial/industrial use. Project access is proposed via seven driveways: two each on Trumble Road and Dawson Road, and three on Sherman Road. The project is proposed to be developed in a single phase, completed and operational in 2024.

Project Trip Generation

Based on the proposed site plan and trip generation rates from the Institute of Transportation Engineers (ITE), the project is expected to generate a total of approximately 8,749 daily vehicle trips, with 1,159 and 1,577 trips in the AM and PM peak hours, respectively. Since the project consists of industrial warehousing, about 20-30% of these vehicle trips are expected to be large trucks. Using studies and data from ITE, South Coast Air Quality Management District (SCAQMD), and San Bernardino County Transportation Authority (SBCTA), the expected project traffic in passenger-car equivalent (PCE) rates is **approximately 9,474 daily PCE trips, with 1,213 and 1,632 PCE trips in the AM and PM peak hours**, respectively.

Analysis and Findings

Acceptable Level of Service Standards

Per the City of Menifee Traffic Impact Analysis Guidelines, the minimum acceptable LOS on roadways and at intersections is **LOS D**, except at constrained locations in close proximity to I-215, where **LOS E** is accepted during peak hours. Per Caltrans District 8 Office of Intergovernmental Review, Community and Regional Planning, the minimum acceptable LOS on state highways and at freeway ramps is **LOS D**.

Level of Service Findings

The following study intersections are expected to operate below the minimum acceptable LOS standard in one or more peak-hour study scenario:

- #1 Case Rd / Bonnie Dr @ I-215 SB (AM peak hour only)
- #7 Ethanac Rd @ I-215 SB
- #8 Ethanac Rd @ I-215 NB
- #9 Ethanac Rd @ Encanto Dr
- #10 Ethanac Rd @ Trumble Rd (AM peak hour only)
- #11 Ethanac Rd @ Sherman Rd
- #12 Ethanac Rd @ Dawson Rd
- #13 Ethanac Rd @ Antelope Rd (PM peak hour only)
- #15 SR-74 @ Menifee Rd
- #16 SR-74 @ Briggs Rd (AM peak hour only)
- #25 McCall Blvd @ I-215 SB (PM peak hour only)

All other study intersections are expected to operate at or above the minimum acceptable LOS standard in all peak-hour study scenarios, including the addition of cumulative project traffic and the proposed project. **Table 1** provides a summary of the intersection LOS analysis results.

Table 1: Intersection LOS Analysis Summary

Intersection	Traffic Control ¹	Existing (2021)		Opening Day (2024)		Opening Day w Cumulative	
		AM	PM	AM	PM	AM	PM
1 Case Rd / Bonnie Dr @ I-215 SB	Signal	E	C	E	D	F	D
2 SR-74 @ I-215 NB	Signal	B	A	B	A	B	B
3 SR-74 @ Trumble Rd	Signal	C	C	D	D	D	D
4 SR-74 @ Sherman Rd	Signal	B	B	C	B	C	C
5 Ethanac Rd @ Murrieta Rd	Signal	C	C	C	C	D	D
6 Ethanac Rd @ Case Rd / Barnett Rd	Signal	B	C	C	C	C	C
7 Ethanac Rd @ I-215 SB	Signal	B	B	D	D	E	F
8 Ethanac Rd @ I-215 NB	Signal	C	D	F	F	F	F
9 Ethanac Rd @ Encanto Dr	TWSC	F	F	F	F	F	F
10 Ethanac Rd @ Trumble Rd	Signal	B	B	E	C	F	D
11 Ethanac Rd @ Sherman Rd	TWSC	D	D	F	F	F	F
12 Ethanac Rd @ Dawson Rd	TWSC	B	B	D	F	E	F
13 Ethanac Rd @ Antelope Rd	TWSC	C	B	C	C	D	E
14 SR-74 @ Palomar Rd	Signal	B	B	B	B	C	C
15 SR-74 @ Menifee Rd	Signal	F	E	F	F	F	F
16 SR-74 @ Briggs Rd	Signal	F	C	F	C	F	D
17 Matthews Rd @ Palomar Rd	TWSC	C	B	C	B	D	C
18 McLaughlin Rd @ Murrieta Rd	TWSC	B	C	C	C	C	C
19 McLaughlin Rd @ Encanto Dr	TWSC	B	A	B	B	B	B
20 McLaughlin Rd @ Trumble Rd	AWSC	A	A	A	A	A	A
21 McLaughlin Rd @ Sherman Rd	TWSC	A	A	B	A	B	A
22 Rouse Rd @ Murrieta Rd	TWSC	B	C	B	D	C	D
23 Rouse Rd @ Encanto Dr	TWSC	B	B	C	B	C	B
24 McCall Blvd @ Bradley Rd	Signal	C	D	C	E	C	E
25 McCall Blvd @ I-215 SB	Signal	B	C	C	D	D	E
26 McCall Blvd @ I-215 NB	Signal	C	B	C	C	D	D
27 McCall Blvd @ Encanto Dr	Signal	C	B	D	C	D	D
28 Sherman Rd @ Project Dwy 1	TWSC	A	A	B	C	C	C
29 Sherman Rd @ Project Dwy 2	TWSC	A	A	B	B	B	B
30 Sherman Rd @ Project Dwy 3	TWSC	A	A	C	C	C	C
31 Trumble Rd @ Project Dwy 4	TWSC	A	A	A	A	A	A
32 Trumble Rd @ Project Dwy 5	TWSC	A	A	A	A	A	A
33 Dawson Rd @ Project Dwy 6	TWSC	A	A	A	B	A	B
34 Dawson Rd @ Project Dwy 7	TWSC	A	A	A	A	A	A

Note: Level of service (LOS) rankings based on average control delay (sec/veh) per Highway Control Manual.

¹ TWSC = two-way stop control; AWSC = all-way stop control

X = LOS falls below minimum threshold

Traffic Signal Warrants

As a preliminary step in assessing the need for traffic signals at currently unsignalized intersections within the study, the peak-hour traffic signal warrant was analyzed as outlined in the California Manual on Uniform Traffic Control Devices (MUTCD). For details, see **Section 7** or **Appendix G**. The following study intersections are expected to meet the peak-hour traffic signal warrant in one or more peak-hour study scenario:

- #9 Ethanac Rd @ Encanto Dr
- #11 Ethanac Rd @ Sherman Rd
- #12 Ethanac Rd @ Dawson Rd
- #17 Matthews Rd @ Palomar Rd

Besides the peak-hour traffic signal warrant (Warrant 3), the MUTCD provides a total of nine warrant guidelines for a traffic signal, and the satisfaction of any single warrant does not require the installation of a traffic signal. The peak-hour traffic signal warrant analysis is only an indicator that an intersection is likely to meet one or more of the other volume-based signal warrants. An engineering study should be conducted to determine that installing a traffic control signal will improve the overall safety and/or operation of the intersection and not seriously disrupt progressive traffic flow.

Proposed Improvements

Based on the proposed project site plan and analysis conducted, various roadway and intersection improvements are proposed within the study area as summarized below (see **Section 6** for details).

Project Design Features

- Construct curb, sidewalk, and driveway improvements on Trumble Road, Sherman Road, and Dawson Road adjacent to project site (see **Appendix I** for details).
- Provide roadway pavement on unpaved roadway sections adjacent to project site.
- Provide roadway pavement on Sherman Road south of project frontage to McLaughlin Road and on McLaughlin Road between Trumble Road and Sherman Road to provide two-lane roadway.
- Signing/striping to be implemented along with detailed construction plans for the project site.
- Sight distance at the project driveways will be reviewed with respect to City of Menifee standards at the time of preparation of final grading, landscape, site development, and street improvement plans.

Traffic Impact Mitigation Measures

As detailed above, several study intersections are expected to operate below the minimum acceptable LOS standard in one or more peak-hour study scenario. **Table 2** summarizes the intersection improvements recommended to mitigate these potential impacts:

Table 2: Recommended Improvements

Intersection	Deficient Operations	Type of Impact	Scenario Needed	Recommended Improvements									
1 Case Rd / Bonnie Dr @ I-215 SB	AM	Cumulative	Opening Day	- provide second SB through lane									
7 Ethanac Rd @ I-215 SB	PM	Cumulative	Cumulative	- provide second EB through lane (no widening) - provide second WB left-turn lane (no widening)									
8 Ethanac Rd @ I-215 NB	AM/PM	Direct	Opening Day	- restripe/widen Ethanac for 2 thru lanes per direction									
			Cumulative	- provide second EB left-turn lane - provide WB right-turn lane									
9 Ethanac Rd @ Encanto Dr	AM/PM	Cumulative	Opening Day	- widen Ethanac to provide 2 thru lanes each direction - install new traffic signal									
10 Ethanac Rd @ Trumble Rd	AM	Direct	Opening Day	- widen Ethanac to provide 2 thru lanes each direction									
11 Ethanac Rd @ Sherman Rd	AM/PM	Direct	Opening Day	- install new traffic signal - provide E/W left-turn lanes - provide SB, EB, WB right-turn lane									
				- NB: provide 2 left-turn lanes, shared thru/right lane - provide N/S protected left-turn phasing									
			Cumulative	- provide WB shared through/right lane at intersection - provide EB right-turn overlap phasing									
12 Ethanac Rd @ Dawson Rd	AM/PM	Direct	Opening Day	- install new traffic signal - provide WB left-turn lane									
13 Ethanac Rd @ Antelope Rd	PM	Cumulative	Cumulative	- widen Ethanac Rd to provide two-way left-turn lane through intersection									
15 SR-74 @ Menifee Rd	AM/PM	Cumulative	Opening Day	- provide N/S left-turn lanes - modify signal to eliminate N/S split phase operation - modify signal to provide N/S protected left-turn - modify signal to provide NB right-turn overlap phasing									
			Cumulative	- provide second WB left-turn lane									
16 SR-74 @ Briggs Rd	AM	Cumulative	Opening Day	- provide second NB left-turn lane, NB right-turn lane - provide SB right-turn lane - modify signal to eliminate N/S split phase operation - modify signal to provide N/S protected left-turn - modify signal to provide EB right-turn overlap phasing									
				25 McCall Blvd @ I-215 SB	PM	Cumulative	Cumulative	- provide second SB left-turn lane - provide second SB right-turn lane	Ethanac Rd (I-215 to Sherman Rd)		Direct	Opening Day	- widen from 1 to 2 lanes each direction (approx. 0.7 mi)
				25 McCall Blvd @ I-215 SB	PM	Cumulative	Cumulative	- provide second SB left-turn lane - provide second SB right-turn lane	Ethanac Rd (I-215 to Sherman Rd)		Direct	Opening Day	- widen from 1 to 2 lanes each direction (approx. 0.7 mi)
25 McCall Blvd @ I-215 SB	PM	Cumulative	Cumulative	- provide second SB left-turn lane - provide second SB right-turn lane									
Ethanac Rd (I-215 to Sherman Rd)		Direct	Opening Day	- widen from 1 to 2 lanes each direction (approx. 0.7 mi)									

Project Fair Share Contribution

Just as the expected project traffic would comprise a portion of the traffic volumes at this intersection, the project would contribute to the cost of improvements proportionately, per City and regional funding programs, (Table 3). For intersections expected to be directly impacted by project traffic, the project would be responsible for 100% of the improvement costs.

Table 3: Project Fair Share Contribution

Intersection	AM Peak Hour			PM Peak Hour			Project Fair Share
	EACP Growth	Project Traffic	Fair Share	EACP Growth	Project Traffic	Fair Share	
1 Case Rd / Bonnie Dr @ I-215 SB	225	34	15.1%	<i>acceptable LOS conditions</i>			15.1%
7 Ethanac Rd @ I-215 SB	<i>acceptable LOS conditions</i>			1,488	647	43.5%	43.5%
8 Ethanac Rd @ I-215 NB	<i>direct project impact</i>						100%
9 Ethanac Rd @ Encanto Dr	1,189	883	74.3%	1,683	1,177	69.9%	74.3%
10 Ethanac Rd @ Trumble Rd	<i>direct project impact</i>						100%
11 Ethanac Rd @ Sherman Rd	<i>direct project impact</i>						100%
12 Ethanac Rd @ Dawson Rd	<i>direct project impact</i>						100%
13 Ethanac Rd @ Antelope Rd	<i>acceptable LOS conditions</i>			614	186	30.3%	30.3%
15 SR-74 @ Menifee Rd	528	89	16.9%	741	125	16.9%	16.9%
16 SR-74 @ Briggs Rd	460	67	14.6%	<i>acceptable LOS conditions</i>			14.6%
25 McCall Blvd @ I-215 SB	<i>acceptable LOS conditions</i>			743	73	9.8%	9.8%

II. INTRODUCTION

Study Objectives

This study evaluates the potential effects on traffic circulation from a proposed industrial development south of Ethanac Road between Trumble Road and Dawson Road in the City of Menifee. The study objectives include:

- Document or extrapolate existing traffic conditions (2021) in the vicinity of the proposed development (study area);
- Determine appropriate traffic volume adjustment factor to account for current atypical conditions;
- Determine the expected project traffic generation;
- Evaluate opening-day traffic scenarios for intersection and roadway levels of service (LOS), including ambient growth and cumulative projects;
- Determine if the LOS required by the City of Menifee, City of Perris, and California Department of Transportation (Caltrans) will be maintained within the study area, and
 - if not, determine the mitigation measures needed to maintain the required LOS; and
- Determine if peak-hour traffic signal warrants are met for any unsignalized study intersections.

Prior to preparing the study, the Cities of Menifee and Perris were solicited for input on and approval of the study scope (**Appendix A**).

Project Location and Description

The proposed project site encompasses approximately 72 acres on the south side of Ethanac Road east of the Interstate 215 (I-215) freeway in the northern portion of the City of Menifee, along its border with the City of Perris and County of Riverside. The site is located within Riverside County's Harvest Valley / Winchester Area Plan, Community of Romoland, and the City of Menifee's Menifee North Specific Plan. It is bounded by Ethanac Road to the north, McLaughlin Road to the south, Trumble Road to the west, and Dawson Road to the east. The site is currently mostly vacant and zoned specific plan commercial/industrial use.

This study analyzes the potential traffic impacts for two proposed warehouses totaling approximately 1,640,130 square feet, along with associated parking and loading facilities as well as required improvements to the project frontage. The site plan has since been updated to a slightly smaller total project size (**Figure 1**, details in **Appendices B and H**); therefore, this study is considered a conservative analysis. Project access is proposed via seven driveways: two each on Trumble Road and Dawson Road, and three on Sherman Road. This study assumes that the project would be developed in a single phase, to be completed and operational in 2024.

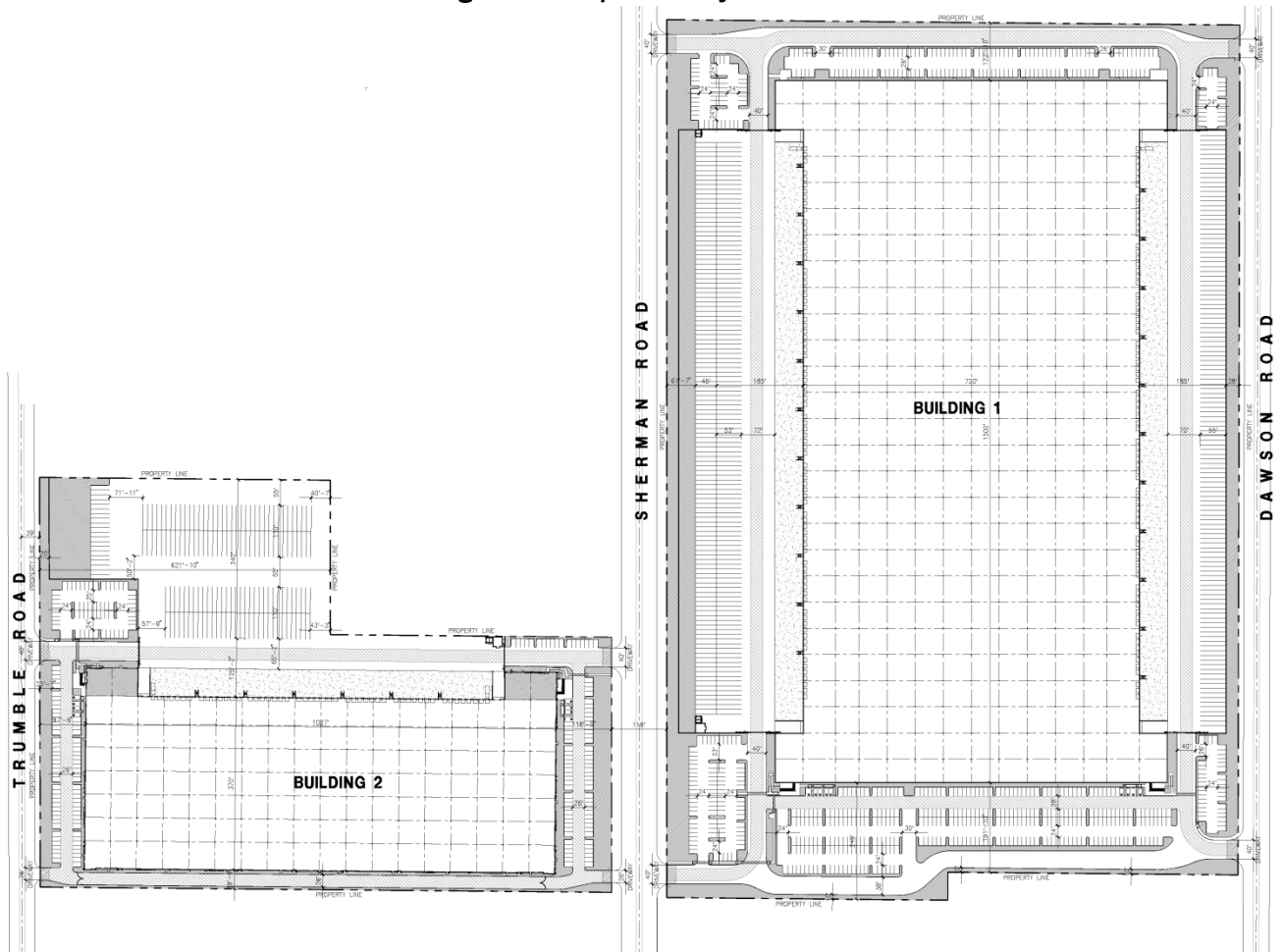
Study Intersections

Based on a review of the existing roadway network and anticipated project traffic, the following study intersections were selected for analysis in conjunction with the City of Menifee (**Figure 2**):

Menifee Commerce Center Traffic Impact Analysis

- | | | | |
|----|--------------------------------------|----|-----------------------------|
| 1 | Case Rd / Bonnie Dr @ I-215 SB Ramps | 12 | Ethanac Rd @ Dawson Rd |
| 2 | SR-74 @ I-215 NB Ramps | 13 | Ethanac Rd @ Antelope Rd |
| 3 | SR-74 @ Trumble Rd | 14 | SR-74 @ Palomar Rd |
| 4 | SR-74 @ Sherman Rd | 15 | SR-74 @ Menifee Rd |
| 5 | Ethanac Rd @ Murrieta Rd | 16 | SR-74 @ Briggs Rd |
| 6 | Ethanac Rd @ Case Rd / Barnett Rd | 17 | Matthews Rd @ Palomar Rd |
| 7 | Ethanac Rd @ I-215 SB Ramps | 18 | McLaughlin Rd @ Murrieta Rd |
| 8 | Ethanac Rd @ I-215 NB Ramps | 19 | McLaughlin Rd @ Encanto Dr |
| 9 | Ethanac Rd @ Encanto Dr | 20 | McLaughlin Rd @ Trumble Rd |
| 10 | Ethanac Rd @ Trumble Rd | 21 | McLaughlin Rd @ Sherman Rd |
| 11 | Ethanac Rd @ Sherman Rd | 22 | Rouse Rd @ Murrieta Rd |
| 23 | Rouse Rd @ Encanto Dr | 29 | Sherman Rd @ Project Dwy 2 |
| 24 | McCall Blvd @ Bradley Rd | 30 | Sherman Rd @ Project Dwy 3 |
| 25 | McCall Blvd @ I-215 SB Ramps | 31 | Trumble Rd @ Project Dwy 4 |
| 26 | McCall Blvd @ I-215 NB Ramps | 32 | Trumble Rd @ Project Dwy 5 |
| 27 | McCall Blvd @ Encanto Dr | 33 | Dawson Rd @ Project Dwy 6 |
| 28 | Sherman Rd @ Project Dwy 1 | 34 | Dawson Rd @ Project Dwy 7 |

Figure 1: Proposed Project Site Plan



MASTER SITE PLAN A
 SCALE: 1" = 100'-0"
 0 100' 200' 300'
 NORTH

Figure 2: Study Intersections



Analysis Methodology

Per the City of Menifee Traffic Study Guidelines, this study uses methodology from the most recent Transportation Research Board *Highway Capacity Manual* to analyze traffic operations via Level of Service (LOS) rankings. Accordingly, the *Highway Capacity Manual* 6th Edition (HCM6, 2016) was used to perform intersection LOS analysis for the following scenarios:

- Existing conditions (2021)
- Opening Day conditions (existing traffic + ambient growth + project, 2024)
- Opening Day conditions with cumulative projects
(existing traffic + ambient growth + cumulative development traffic + project, 2024)

LOS measures transportation quality of service from the traveler’s perspective. Per the HCM6, LOS rankings at intersections use a letter-grade scale ranging from LOS A (optimal conditions) to LOS F (congested or overcrowded conditions) based on average control delay in seconds per vehicle, or how long a vehicle typically waits before proceeding through the intersection. This delay is compared with free-flow conditions, and includes slowing before an intersection, waiting in queues, and stopping at the intersection. This study uses Vistro traffic modeling software to evaluate LOS at both signalized and unsignalized intersections.

For signalized and all-way stop-controlled intersections, LOS rankings are based on the average control delay of all vehicles passing through the intersection. For two-way or side-street stop-controlled intersections, LOS rankings are based on the highest average control delay of all controlled movements. **Tables 4 and 5** show the LOS delay thresholds for signalized and unsignalized intersections, respectively.

Table 4: Level of Service at Signalized Intersections

Control Delay (sec/vehicle)	Level of Service	Description
0 - 10	A	Minimal delay and primarily free-flow operation. Most vehicles do not stop or only stop for a brief amount of time.
10 - 20	B	Short delay and reasonably unimpeded operation. Many vehicles do not stop or only stop for a short time. More vehicles stop than with LOS A.
20 - 35	C	Moderate delay and stable operation. Individual cycle failures may begin to appear. The number of vehicles stopping is significant.
35 - 55	D	Less stable operation; small increases in vehicles may cause substantial increases in delay. Many vehicles stop, individual cycle failures noticeable.
55 - 80	E	Significant delay and unstable operation. Most vehicles stop and individual cycle failures are frequent.
80 +	F	Considerable delay and extensive queuing. Almost all vehicles stop and most cycles fail to clear the queue.

Source: Transportation Research Board, Highway Capacity Manual 6 (2016)

Table 5: Level of Service at Unsignalized Intersections

Control Delay (sec/vehicle)	Level of Service	Description
0 - 10	A	Minimal delay. Usually no conflicting traffic.
10 - 15	B	Short delay. Occasionally some conflicting traffic.
15 - 25	C	Noticeable delay, but not inconveniencing. Usually some conflicting traffic.
25 - 35	D	Noticeable delay and irritating. A significant amount of conflicting traffic. Increased likelihood of risk taking.
35 - 50	E	Significant delay approaching tolerance level. Lots of conflicting traffic, with some gaps of suitable size. Risk taking behavior likely.
50 +	F	Considerable delay exceeding tolerance level. Lots of conflicting traffic, with not enough gaps of suitable size. High likelihood of risk taking.

Source: Transportation Research Board, Highway Capacity Manual 6 (2016)

Level of Service Standards

Per the City of Menifee Traffic Impact Analysis Guidelines (2019), the minimum acceptable LOS on roadway segments and at intersections is **LOS D**, except at constrained locations in close proximity to I-215, where **LOS E** is accepted during peak hours. Per Caltrans District 8 Office of Intergovernmental Review, Community and Regional Planning, the minimum acceptable LOS on state highways and at freeway ramps is **LOS D**.

Significant Impact and Mitigation Criteria

The project’s potential traffic impacts are evaluated per the City of Menifee and Caltrans standards. Per the City of Menifee Traffic Impact Analysis Guidelines (2019), the expected project traffic impacts are considered significant under the following conditions:

- If the pre-Project condition at an intersection or roadway segment is at or better than the minimum acceptable LOS (LOS D, or LOS E at constrained locations near I-215) and the addition of project trips results in unacceptable LOS (LOS E or LOS F), a significant impact is forecast to occur. This type of impact would be considered a “direct” project impact in which the project would be fully responsible for mitigating the impact.
- If the pre-Project condition is LOS E or F and the Project adds 50 or more peak hour trips to the intersection or roadway segment, then a significant impact is forecast to occur. This type of impact would be considered a “cumulative” project impact in which the project would be required to contribute a fair share payment toward mitigating the impact.

Additionally, the project traffic impact at an unsignalized intersection is considered significant if the addition of project traffic is anticipated to result in the intersection meeting the peak-hour traffic signal warrant as described in the California Manual on Uniform Traffic Control Devices (MUTCD).

III. PROPOSED PROJECT TRAFFIC

This study uses a multi-step process to estimate project traffic. First, project trip generation estimates the total arriving and departing traffic during a typical weekday and the weekday peak hours by applying the appropriate vehicle trip generation rates to the project development tabulation. Next, trip distribution identifies the origins and destinations of project traffic based on existing and expected future travel patterns. Finally, traffic assignment allocates the distributed project traffic to specific roadways and intersections.

Project Trip Generation

Trip Generation Rates

Trip generation represents the amount of traffic accessing a site, differentiated by inbound and outbound vehicle trip ends. The Institute of Transportation Engineers (ITE) *Trip Generation Manual* 10th Edition (2017) uses thousands of studies across the nation to determine common trip generation characteristics by land use. Using the *Manual*, the anticipated project trip generation was determined using trip generation rates given by ITE Land Use Codes #150 (Warehousing) and #155 (High-Cube Fulfillment Center Warehouse).

Since warehouse operations use large trucks, specialized studies have also been conducted by both ITE and the Southern California Air Quality Management District. From these studies, average truck fleet mix percentages can be applied to the vehicle trip generation rates to determine the amount of 2-, 3-, and 4+-axle trucks expected to access the project. Finally, truck trips are weighted by passenger-car equivalent factors (PCE) from the 2016 County of San Bernardino Congestion Management Program update. **Tables 6 and 7** show the trip generation rates used in this study, in both raw vehicle trips and PCE trips.

Trip Generation

The trip generation volumes are developed by multiplying the trip generation rates by the size of the proposed project. While it is common to deduct the trip generation for existing land uses to determine net new trips generated, the project site is currently vacant, so no existing trip credits were deducted in this study. Per the project trip generation analysis, it is expected that Building 1 would generate approximately 8,444 daily PCE trip-ends, with 1,132 and 1,541 PCE trips during the AM and PM peak hours, respectively (**Table 8**), while Building 2 would generate approximately 1,030 daily PCE trips, with 81 and 91 PCE trips during the AM and PM peak hours, respectively (**Table 9**). Overall, the project is expected to generate approximately **9,474 PCE trips daily, with 1,213 and 1,632 PCE trips in the AM and PM peak hours, respectively (Table 10).**

Table 6: Trip Generation Rates - Warehousing

Vehicle Type	PCE Factor ¹	Estimated Mix ²	Units ³	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Trip Generation Rates (classification, non-PCE)⁴										
<i>Passenger Cars⁵</i>	-	-	KSF	1.140	0.121	0.030	0.150	0.036	0.124	0.16
<i>2-axle Trucks</i>	-	16.7%		0.100	0.002	0.002	0.003	0.003	0.002	0.005
<i>3-axle Trucks</i>	-	20.7%		0.124	0.002	0.002	0.004	0.003	0.003	0.006
<i>4-axle Trucks</i>	-	62.5%		0.375	0.007	0.006	0.013	0.010	0.009	0.019
Total		100%		1.74	0.131	0.039	0.17	0.051	0.139	0.19
Calculated Trip Generation Rates (PCE)										
<i>Passenger Cars⁵</i>	1	-	KSF	1.14	0.121	0.030	0.151	0.036	0.124	0.16
<i>2-axle Trucks</i>	1.5	16.7%		0.15	0.003	0.002	0.005	0.004	0.004	0.008
<i>3-axle Trucks</i>	2	20.7%		0.25	0.004	0.004	0.008	0.006	0.006	0.012
<i>4-axle Trucks</i>	3	62.5%		1.13	0.020	0.018	0.038	0.029	0.027	0.056
Total		100%		2.67	0.148	0.054	0.202	0.075	0.161	0.236

¹ PCE factors per San Bernardino County Transportation Authority

² Truck mix per High-Cube Warehouse Vehicle Trip Generation Analysis, ITE (2017); Warehouse Truck Trip Study, SCAQMD (2014)

³ KSF = 1,000 square feet gross floor area

⁴ ITE Trip Generation Manual 10th Ed + Supplement, 2017 - Land Use 150, Warehousing

⁵ Passenger car rates per ITE vehicle trip generation rates less ITE truck trip generation rates.

Table 7: Trip Generation Rates – High-Cube Fulfillment Center Warehouse

Vehicle Type	PCE Factor ¹	Estimated Mix ²	Units ³	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Trip Generation Rates (classification, non-PCE)⁴										
<i>Passenger Cars⁵</i>	-	-	KSF	6.25	0.695	0.155	0.850	0.459	0.721	1.18
<i>2-axle Trucks</i>	-	16.7%		0.032	0.002	0.002	0.003	0.002	0.002	0.0033
<i>3-axle Trucks</i>	-	20.7%		0.039	0.002	0.002	0.004	0.002	0.002	0.004
<i>4-axle Trucks</i>	-	62.5%		0.119	0.006	0.006	0.013	0.006	0.007	0.013
Total		100%		6.44	0.705	0.165	0.87	0.468	0.732	1.2
Calculated Trip Generation Rates (PCE)										
<i>Passenger Cars⁵</i>	1	-	KSF	6.25	0.695	0.155	0.85	0.459	0.721	1.18
<i>2-axle Trucks</i>	1.5	16.7%		0.05	0.003	0.003	0.006	0.002	0.003	0.005
<i>3-axle Trucks</i>	2	20.7%		0.08	0.004	0.004	0.008	0.004	0.004	0.008
<i>4-axle Trucks</i>	3	62.5%		0.36	0.019	0.019	0.038	0.017	0.020	0.037
Total		100%		6.74	0.721	0.181	0.902	0.482	0.748	1.23

¹ PCE factors per San Bernardino County Transportation Authority

² Truck mix per High-Cube Warehouse Vehicle Trip Generation Analysis, ITE (2017); Warehouse Truck Trip Study, SCAQMD (2014)

³ KSF = 1,000 square feet gross floor area

⁴ ITE Trip Generation Manual 10th Ed + Supplement, 2017 - Land Use 155, High-Cube Fulfillment Center Warehouse (sort facility)

⁵ Passenger car rates per ITE vehicle trip generation rates less ITE truck trip generation rates.

Table 8: Project Trip Generation – Building 1

Vehicle Type	PCE Factor ¹	Units ²	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Proposed Project Trip Generation (classification, non-PCE)									
Passenger Cars ⁵	-	1,254 KSF	7,839	871	195	1,066	575	905	1,480
2-axle Trucks	-		40	2	2	4	2	2	4
3-axle Trucks	-		49	3	3	6	2	3	5
4-axle Trucks	-		149	8	8	16	7	8	15
Total				8,077	884	208	1,092	586	918
Passenger Car Equivalent (PCE) Project Trip Generation									
Passenger Cars ⁵	1	1,254 KSF	7,839	871	195	1,066	575	905	1,480
2-axle Trucks	1.5		60	3	3	6	3	3	6
3-axle Trucks	2		98	6	6	12	4	6	10
4-axle Trucks	3		447	24	24	48	21	24	45
Total				8,444	904	228	1,132	603	938

¹ PCE factors per San Bernardino County Transportation Authority

² KSF = 1,000 square feet gross floor area

Table 9: Project Trip Generation – Building 2

Vehicle Type	PCE Factor ¹	Units ²	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Proposed Project Trip Generation (classification, non-PCE)									
Passenger Cars ⁵	-	386 KSF	440	47	11	58	14	48	62
2-axle Trucks	-		39	1	1	2	1	1	2
3-axle Trucks	-		48	1	1	2	1	1	2
4-axle Trucks	-		145	3	2	5	4	3	7
Total				672	52	15	67	20	53
Passenger Car Equivalent (PCE) Project Trip Generation									
Passenger Cars ⁵	1	386 KSF	440	47	11	58	14	48	62
2-axle Trucks	1.5		59	2	2	4	2	2	4
3-axle Trucks	2		96	2	2	4	2	2	4
4-axle Trucks	3		435	9	6	15	12	9	21
Total				1,030	60	21	81	30	61

¹ PCE factors per San Bernardino County Transportation Authority

² KSF = 1,000 square feet gross floor area

Table 10: Project Trip Generation – Total Project

Vehicle Type	PCE Factor ¹	Units ²	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Proposed Project Trip Generation (classification, non-PCE)									
Passenger Cars ⁵	-	1,640 KSF	8,279	918	206	1,124	589	953	1,542
2-axle Trucks	-		79	3	3	6	3	3	6
3-axle Trucks	-		97	4	4	8	3	4	7
4-axle Trucks	-		294	11	10	21	11	11	22
Total				8,749	936	223	1,159	606	971
Passenger Car Equivalent (PCE) Project Trip Generation									
Passenger Cars ⁵	1	1,640 KSF	8,279	918	206	1,124	589	953	1,542
2-axle Trucks	1.5		119	5	5	10	5	5	10
3-axle Trucks	2		194	8	8	16	6	8	14
4-axle Trucks	3		882	33	30	63	33	33	66
Total				9,474	964	249	1,213	633	999

¹ PCE factors per San Bernardino County Transportation Authority

² KSF = 1,000 square feet gross floor area

Project Trip Distribution and Assignment

Modal Split

Based on the industrial nature of the project and its distance from existing public transit stops, no project traffic reductions from transit use are considered in this study. For a conservative analysis, this study also uses no project traffic reductions from active transportation modes such as bicycling and walking.

Trip Distribution

Trip distribution, or the directional orientation of traffic to and from the project, is based on the project’s geographical location, nearby land uses, and proximity to the regional freeway system. The proposed project trip distribution for passenger vehicles and trucks are shown in **Figures 3 and 4**, respectively. The proposed project trip distribution at the project driveways is shown in **Figure 5**.

Figure 3: Directional Distribution of Project Traffic (Passenger Cars)

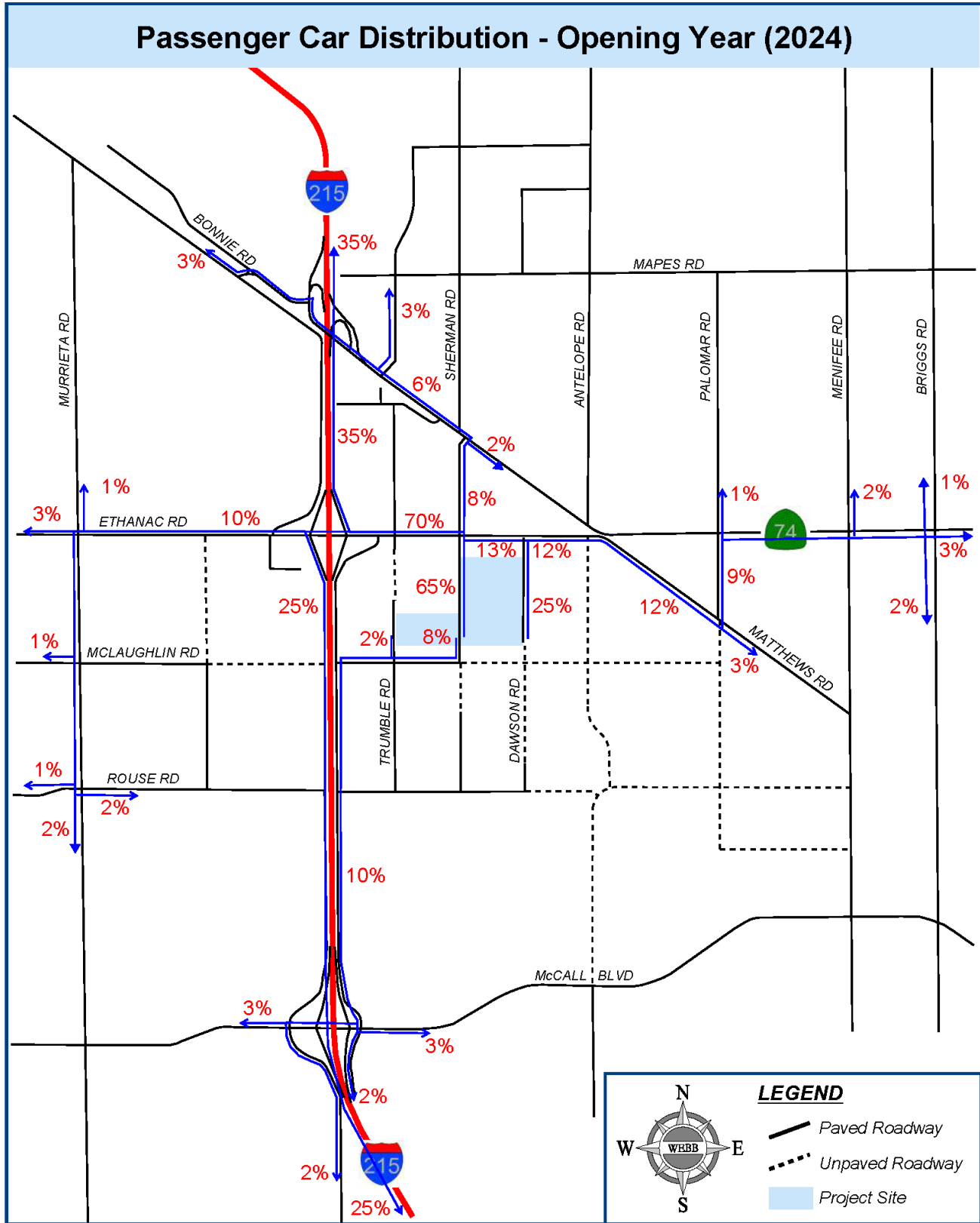


Figure 4: Directional Distribution of Project Traffic (Trucks)

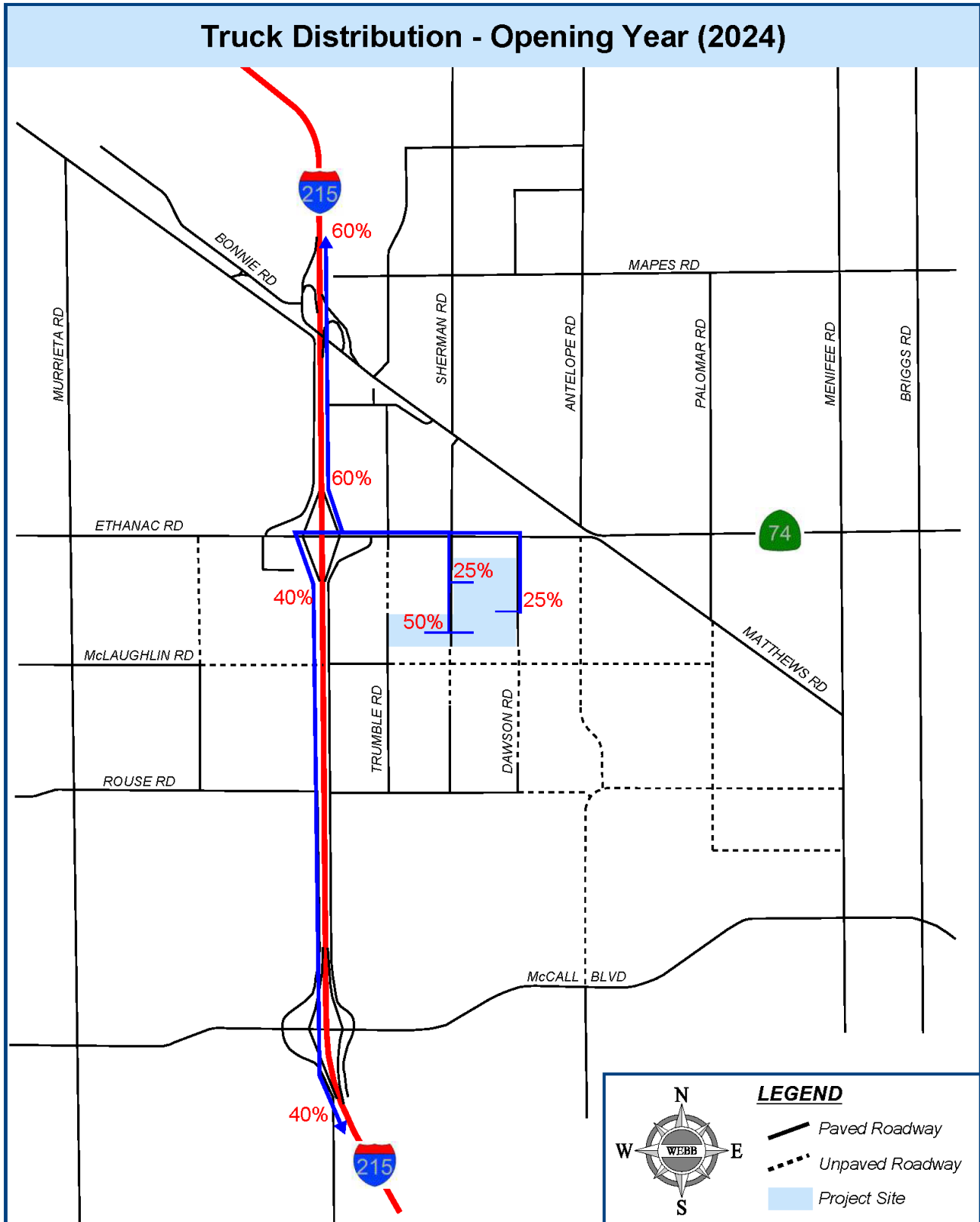
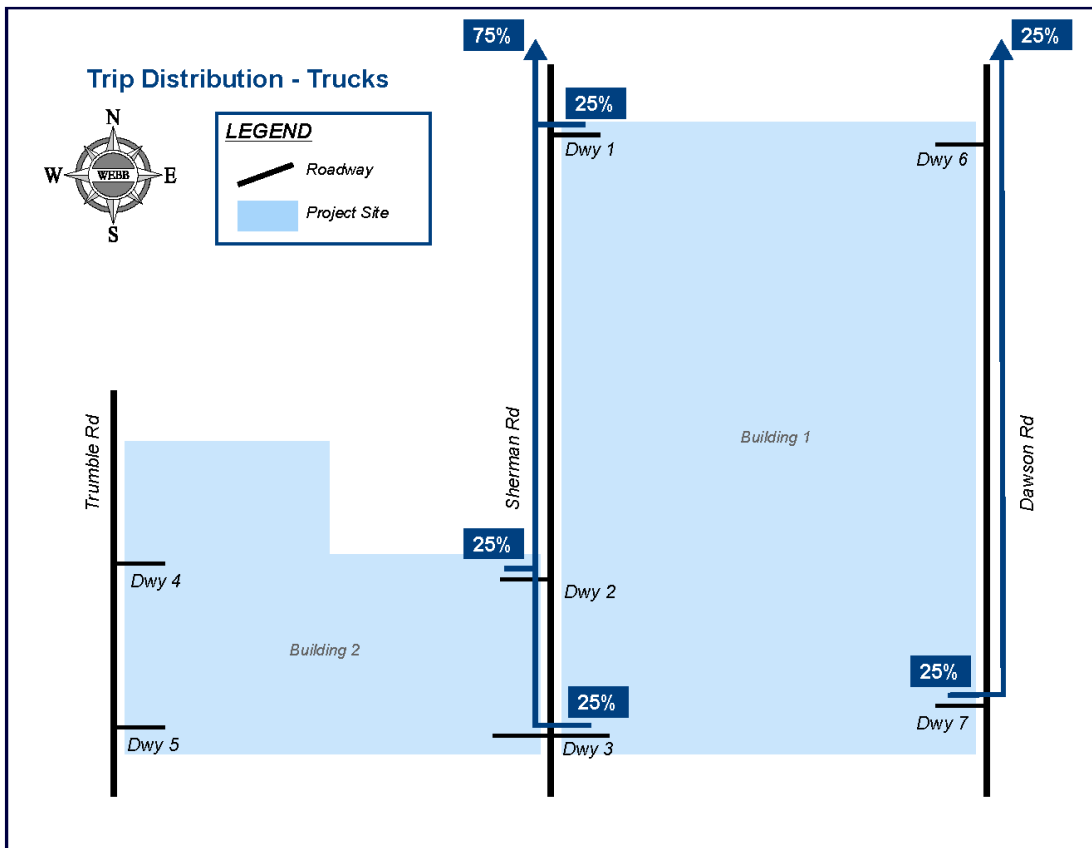
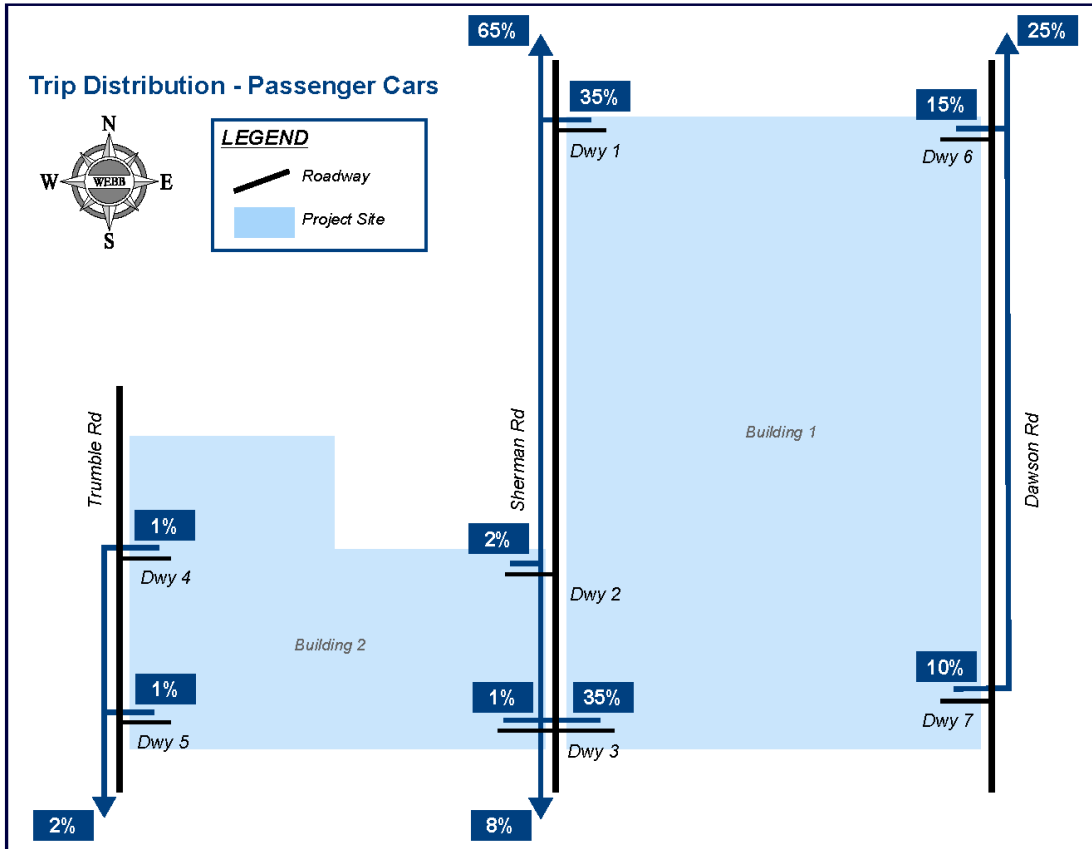


Figure 5: Project Traffic Distribution – Driveways



Reference Map: Study Intersections



Trip Assignment

Once the anticipated project trip generation is calculated, the trips are specifically assigned to roadways and intersections on the existing roadway network according to the trip distribution model. **Figures 6 and 7** show the project trips at the study intersections for the AM and PM peak hours, respectively.

Figure 6: Project Traffic Volumes (PCE) – AM Peak Hour

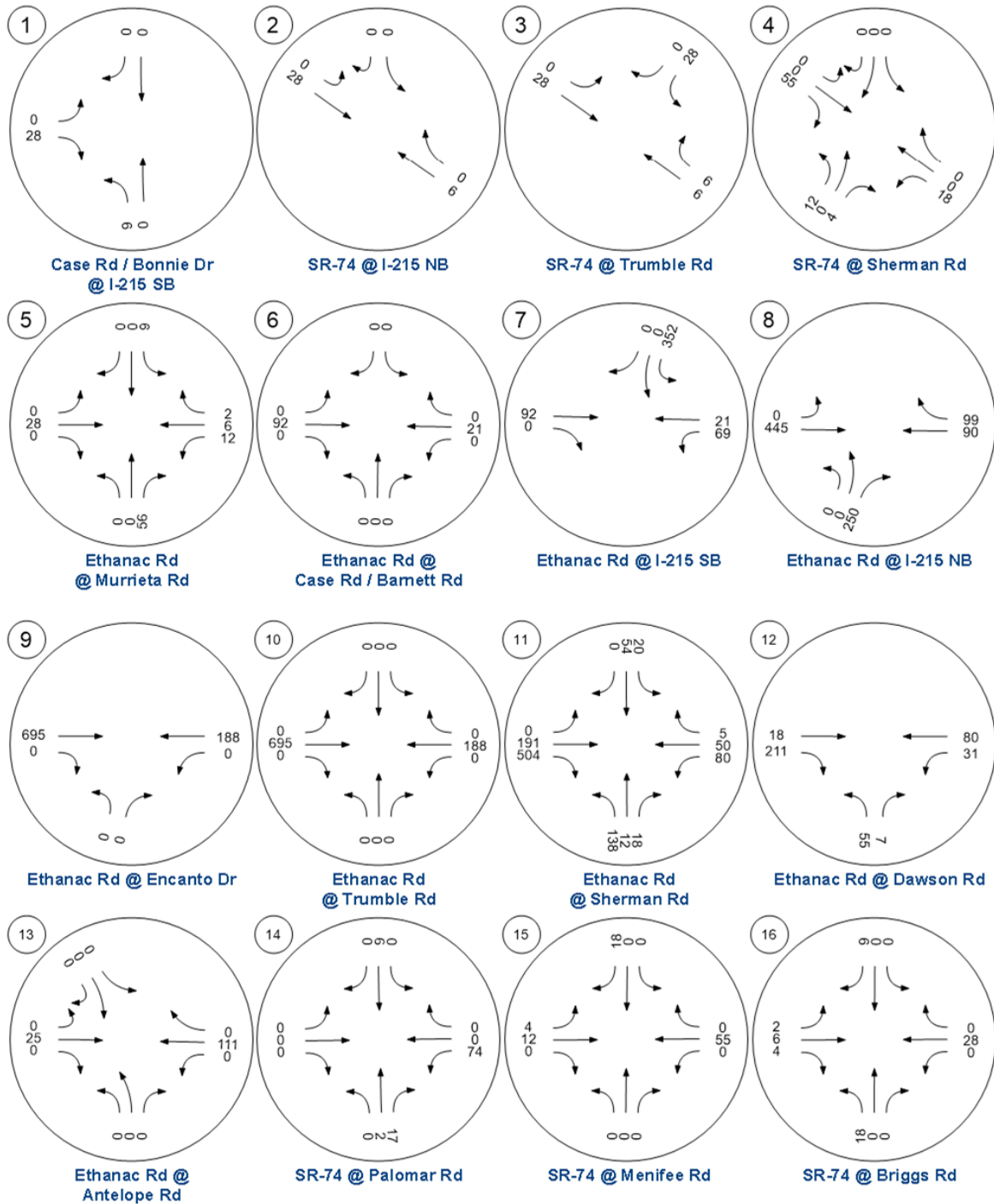


Figure 6 (cont): Project Traffic Volumes (PCE) – AM Peak Hour

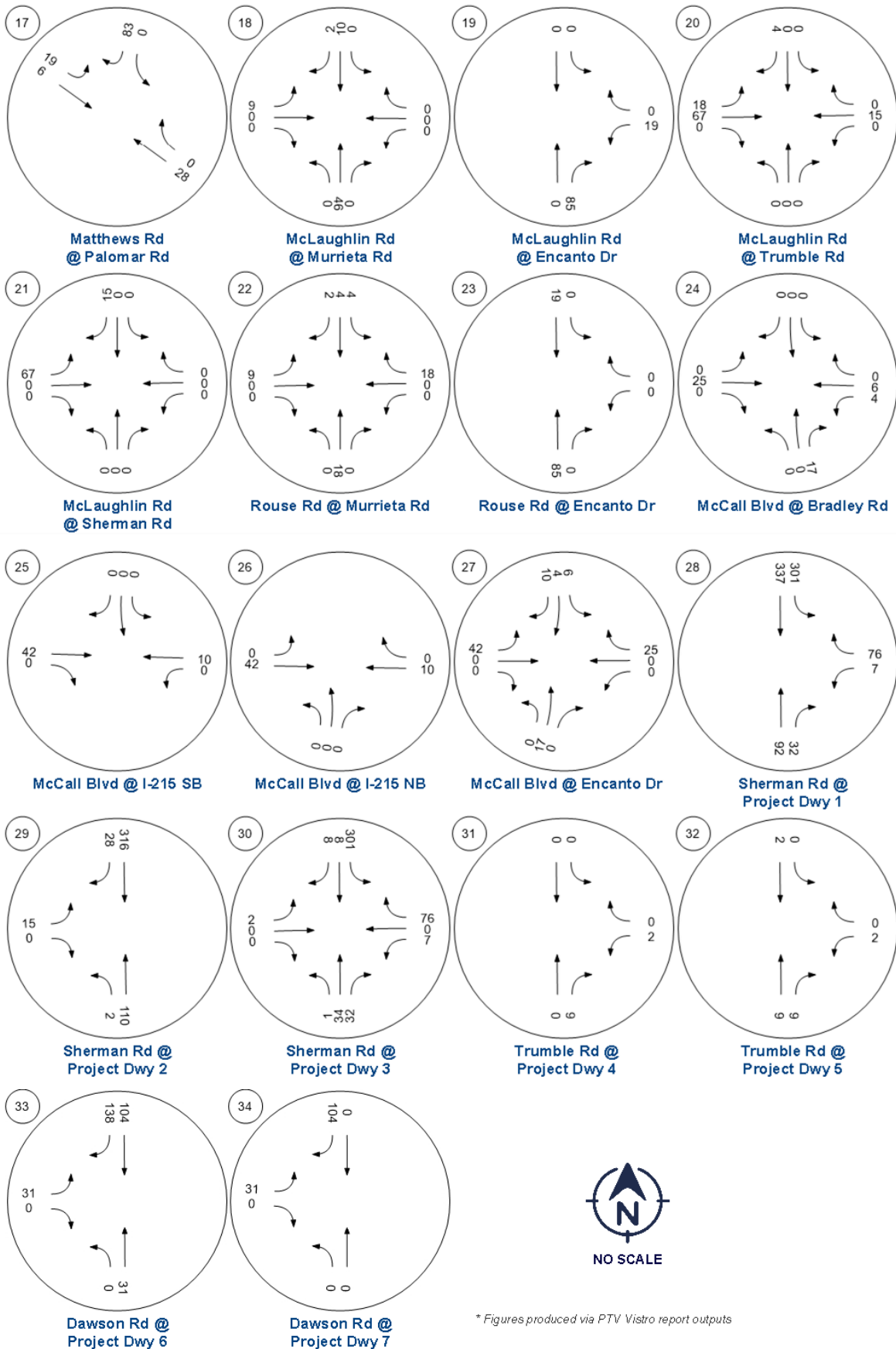


Figure 7: Project Traffic Volumes (PCE) – PM Peak Hour

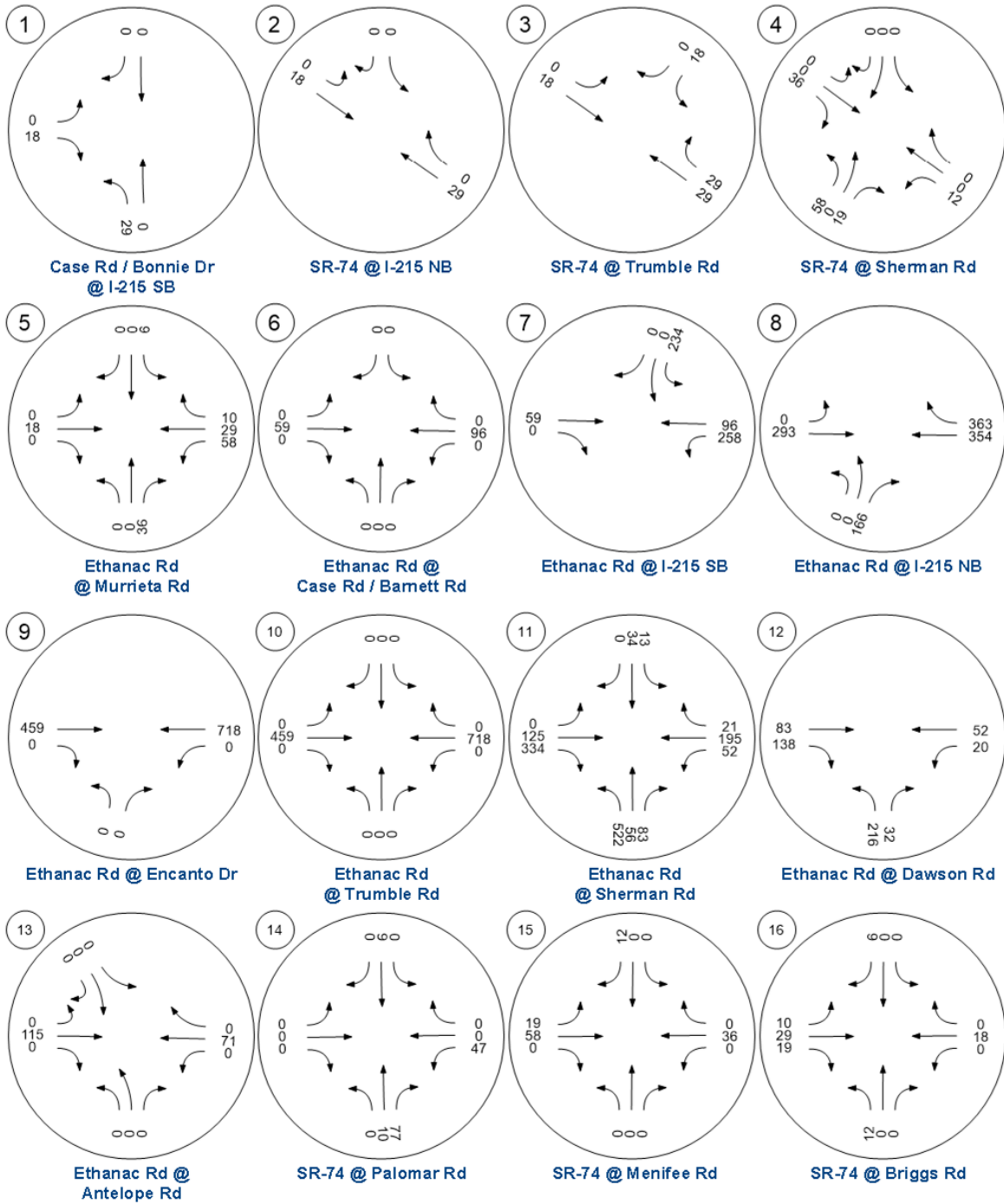
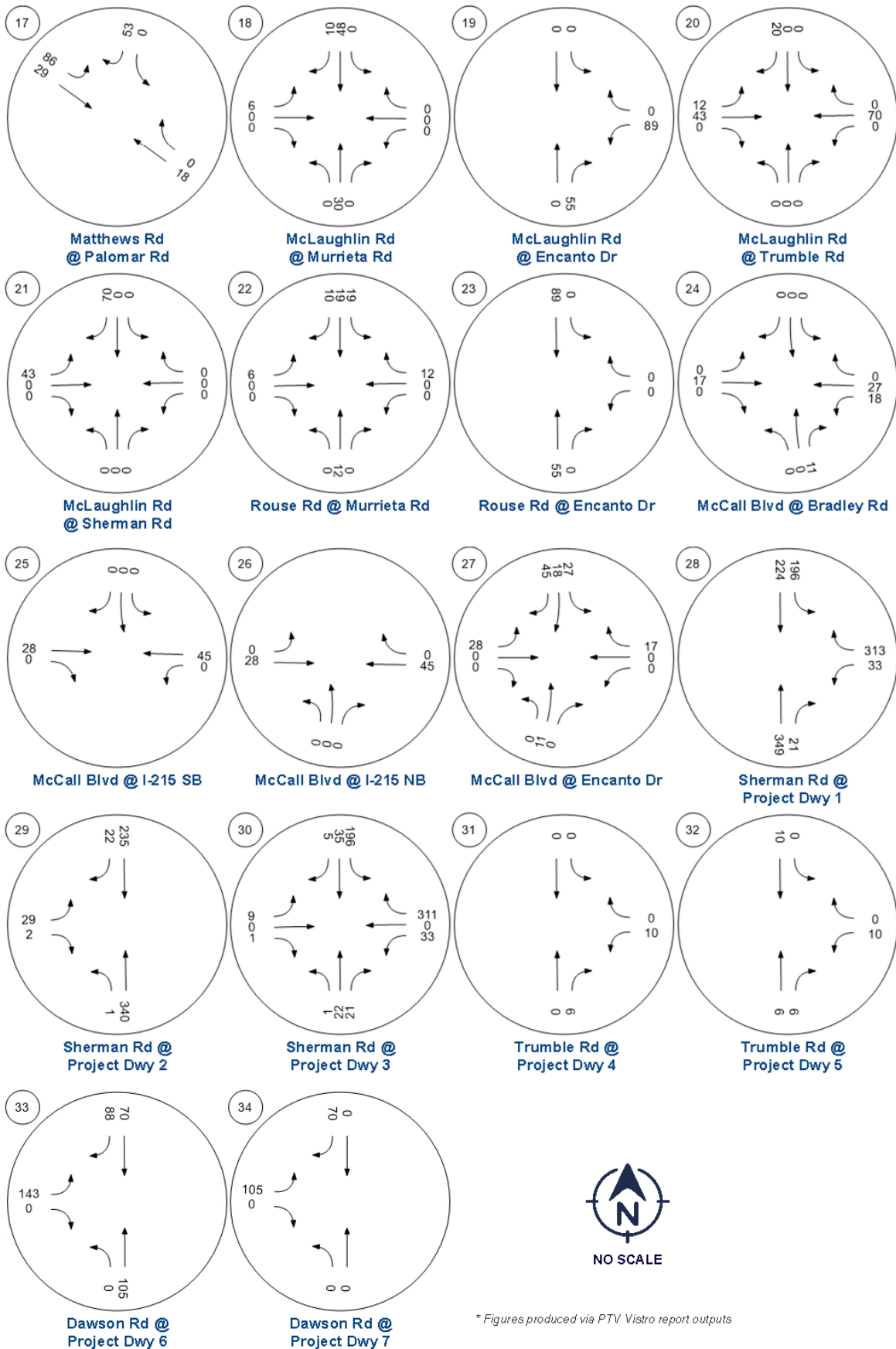


Figure 7 (cont): Project Traffic Volumes (PCE) – PM Peak Hour



* Figures produced via PTV Vistro report outputs

IV. EXISTING CONDITIONS (2021)

The proposed project site encompasses approximately 72 acres on the south side of Ethanac Road east of the Interstate 215 (I-215) freeway in the southern portion of the City of Menifee, along its border with the City of Perris and County of Riverside. The site is located within Riverside County's Harvest Valley / Winchester Area Plan, Community of Romoland, and the City of Menifee's Menifee North Specific Plan. It is bounded by Ethanac Road to the north, McLaughlin Road to the south, Trumble Road to the west, and Dawson Road to the east. The site is currently vacant and zoned specific plan commercial/industrial use.

Existing Roadway Network

State Route 74 (SR-74) is a four-lane regional roadway providing access to the I-215 freeway. West of Antelope Road, it is classified as a Major in the City of Menifee General Plan and has a northwest/southeast orientation. East of Antelope Road, it is classified as an Expressway in the City of Menifee General Plan and has an east/west orientation.

Also providing access to the I-215 freeway, **Ethanac Road** is classified as an Expressway in the City of Menifee General Plan. It currently has four travel lanes west of the I-215 interchange and two travel lanes east of it. From Goetz Road to Sherman Road, it forms part of the City of Menifee's boundary with the City of Perris.

Portions of **McLaughlin Road** within the study area are currently unpaved and undeveloped. Discontinuous at the I-215 freeway, west of Evans Road it is currently a two-lane roadway classified as a Secondary in the City of Menifee General Plan. West of Encanto Drive, it is a two-lane roadway classified as a Collector and remains unpaved east of Trumble Road.

West of the I-215 interchange, **McCall Boulevard** is a four-lane roadway classified as a Major in the City of Menifee General Plan. East of the I-215, it is classified as an Urban Arterial.

Murrieta Road is a two-lane roadway classified as a Secondary in the City of Menifee General Plan.

Encanto Drive is a two-lane roadway classified as a Major in the City of Menifee General Plan. It terminates to the north at Ethanac Road.

Trumble Road is a two-lane roadway classified as a Collector in the City of Menifee General Plan. A portion of it between Ethanac Road and McLaughlin Road, including along the proposed project frontage, is currently unpaved and undeveloped.

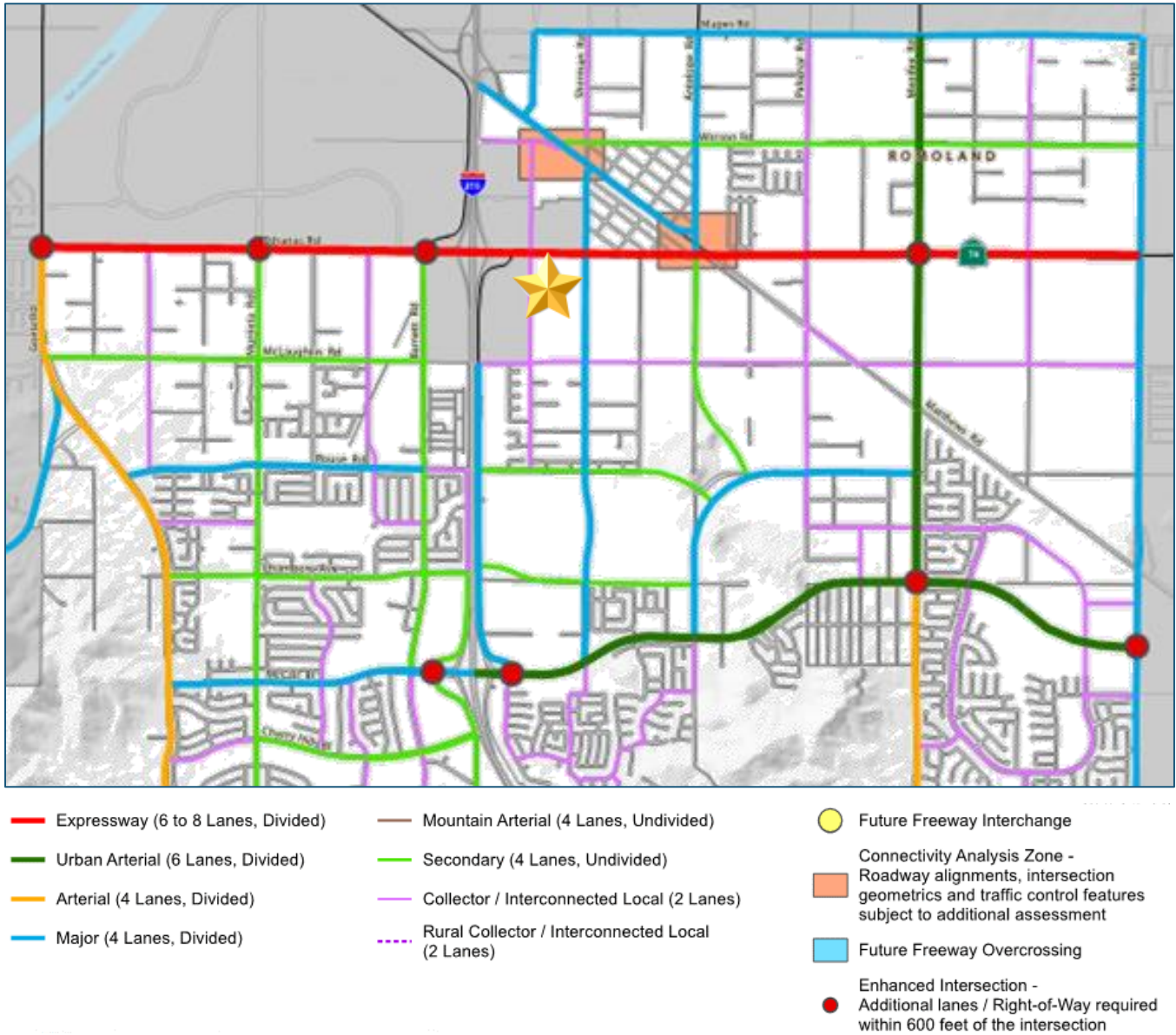
Sherman Road is a two-lane roadway classified as a Major in the City of Menifee General Plan. Portions of it between SR-74 and Rouse Road are currently unpaved and undeveloped, including along the proposed project frontage.

Dawson Road is classified as a Local in the City of Menifee General Plan. It terminates at Ethanac Road to the north and Rouse Road to the south. It is currently largely undeveloped, with few roadside features such as curbs and gutters and a large portion currently unpaved south of the proposed project frontage.

Palomar Road is a two-lane roadway classified as a Collector in the City of Menifee General Plan.

Figure 8 shows the City of Menifee General Plan roadway system within the study area.

Figure 8: City of Menifee Roadway Network (excerpt)



Existing Intersection Geometrics and Traffic Control

Figure 9 identifies the existing intersection traffic controls, intersection geometrics, and number of vehicle lanes for each study intersection.

Reference Map: Study Intersections

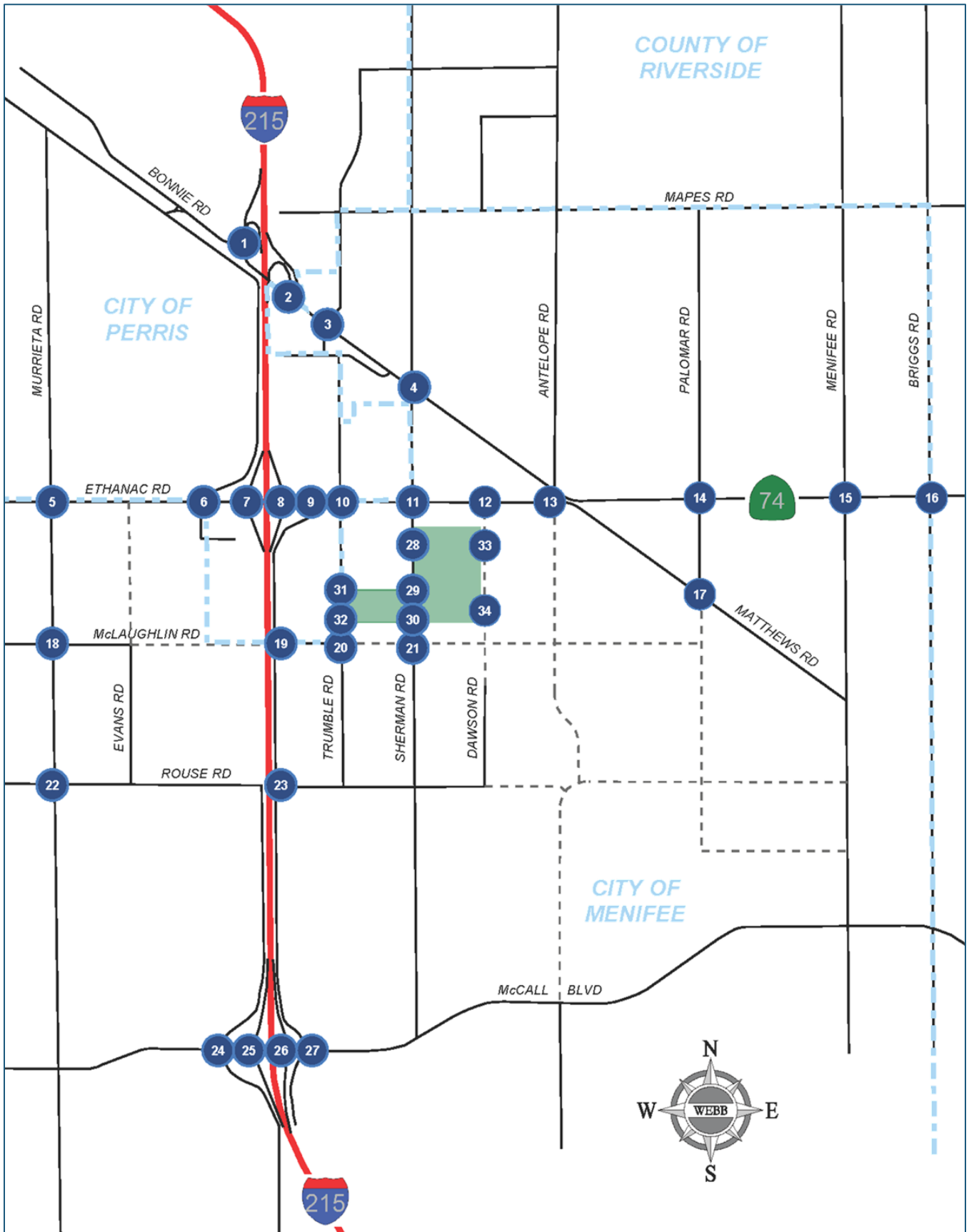


Figure 9: Existing Intersection Geometrics and Traffic Control

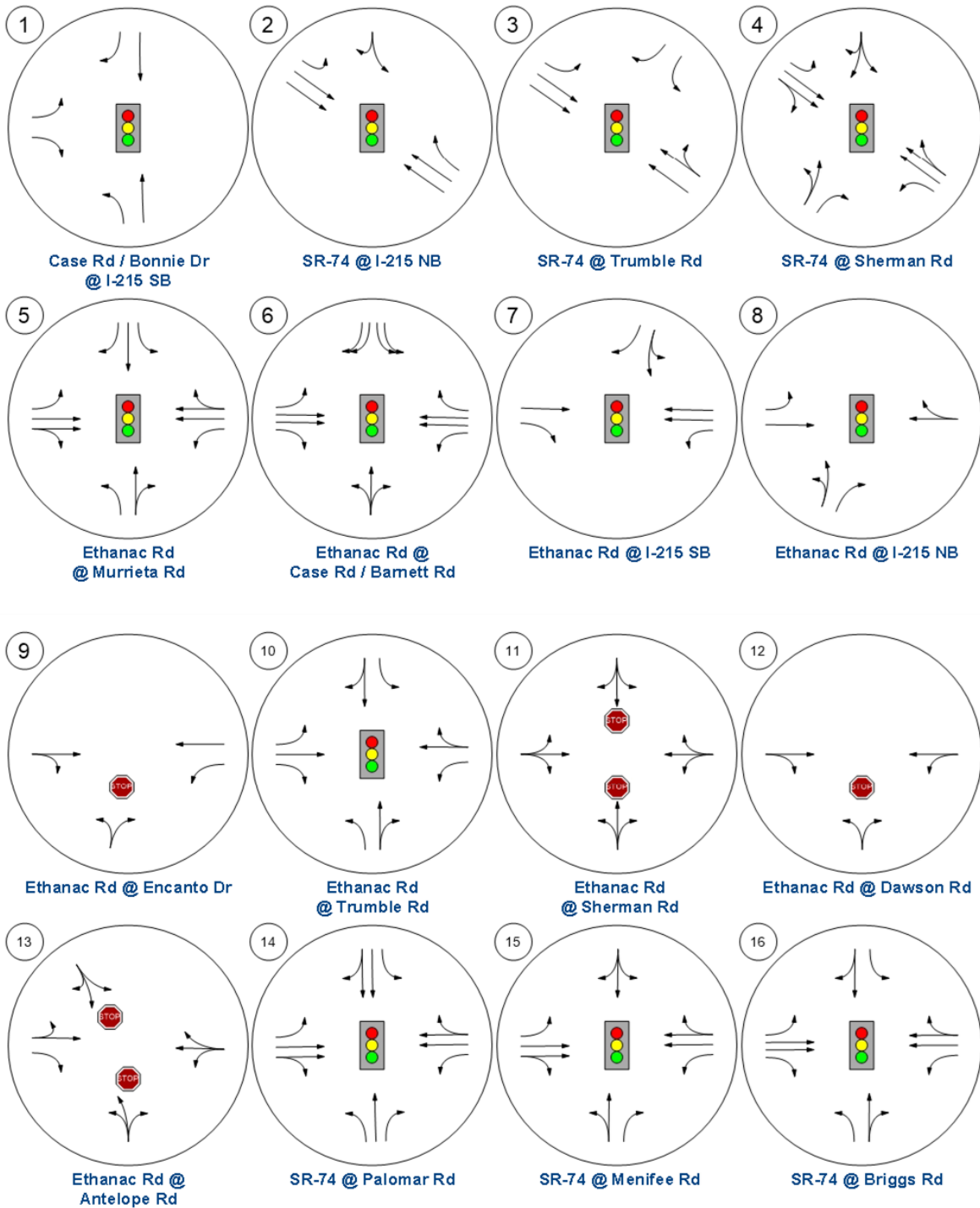
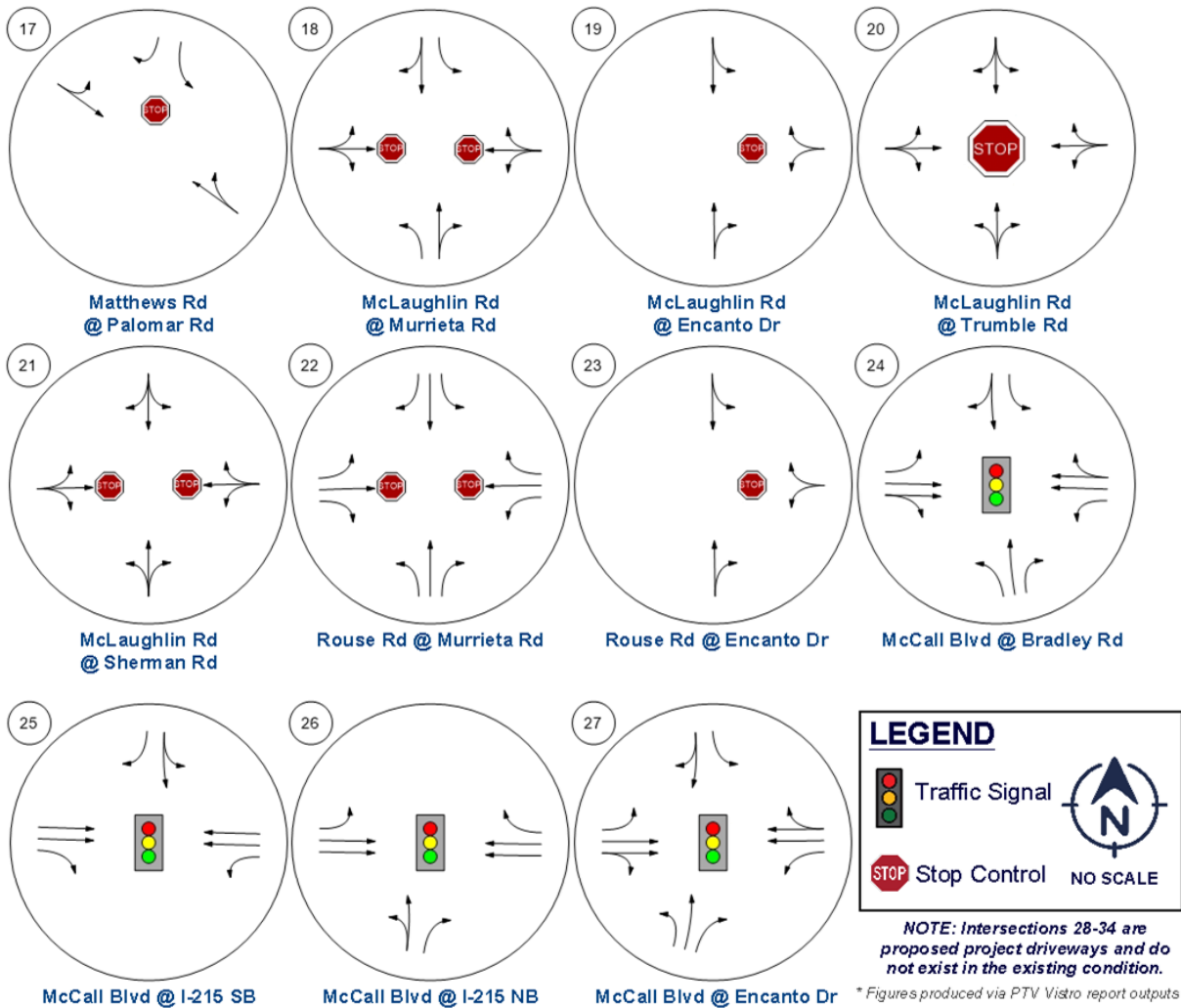


Figure 9 (cont): Existing Intersection Geometrics and Traffic Control



Traffic Volume Adjustments

Recent traffic patterns have been affected by the ongoing COVID-19 pandemic, as stay-at-home orders and remote work measures have been widely implemented throughout the region. Therefore, a traffic volume adjustment factor is applied to 2021 traffic volume data based on daily traffic volumes on SR-74 between Trumble Road and Sherman Road. The adjustment factor is calculated by applying a 2% annual ambient growth to 2019 data to estimate typical 2021 traffic volumes, then comparing actual 2021 traffic volumes at the same location. The COVID-19 Pandemic Adjustment Rate for the study area of **1.32** is applied to all 2021 traffic volume data used in this study (Table 11, data in Appendix C).

Table 11: Traffic Volume Adjustment Rate

Scenario	Daily Traffic Volume
	<i>Hwy 74, Trumble - Sherman</i>
2019 Traffic Counts	27,674
2021 Estimated Traffic ¹	28,781
2021 Traffic Counts	21,796
COVID-19 Pandemic Adjustment Rate	1.32

¹ Estimated by adding 4% annual ambient growth to 2019 traffic volumes

Existing Traffic Volumes

To establish a baseline analysis for existing conditions, intersection turning movement counts were conducted at the study intersections in June 2018, January-February 2019, and January 2021 for the AM and PM peak periods (Table 12, details in Appendix C). Traffic volume data from previous years is adjusted to 2021 conditions by applying a 2% annual ambient growth rate, while 2021 data is adjusted to expected typical conditions by applying a 1.32 pandemic adjustment factor. The AM and PM peak-hour traffic volumes are shown in Figures 10 and 11, respectively.

Table 12: Intersection Traffic Volume Data Year

	Intersection	Counts Year
1	Case Rd / Bonnie Dr @ I-215 SB	2019
2	SR-74 @ I-215 NB	2019
3	SR-74 @ Trumble Rd	2019
4	SR-74 @ Sherman Rd	2019
5	Ethanac Rd @ Murrieta Rd	2019
6	Ethanac Rd @ Case Rd / Barnett Rd	2019
7	Ethanac Rd @ I-215 SB	2018
8	Ethanac Rd @ I-215 NB	2018
9	Ethanac Rd @ Encanto Dr	2018
10	Ethanac Rd @ Trumble Rd	2018
11	Ethanac Rd @ Sherman Rd	2018
12	Ethanac Rd @ Dawson Rd	2018
13	Ethanac Rd @ Antelope Rd	2019
14	SR-74 @ Palomar Rd	2019
15	SR-74 @ Menifee Rd	2019
16	SR-74 @ Briggs Rd	2019
17	Matthews Rd @ Palomar Rd	2019
18	McLaughlin Rd @ Murrieta Rd	2021
19	McLaughlin Rd @ Encanto Dr	2019
20	McLaughlin Rd @ Trumble Rd	2019
21	McLaughlin Rd @ Sherman Rd	2021
22	Rouse Rd @ Murrieta Rd	2021
23	Rouse Rd @ Encanto Dr	2019
24	McCall Blvd @ Bradley Rd	2021
25	McCall Blvd @ I-215 SB	2019
26	McCall Blvd @ I-215 NB	2019
27	McCall Blvd @ Encanto Dr	2019

Figure 10: Existing Traffic Volumes – AM Peak Hour

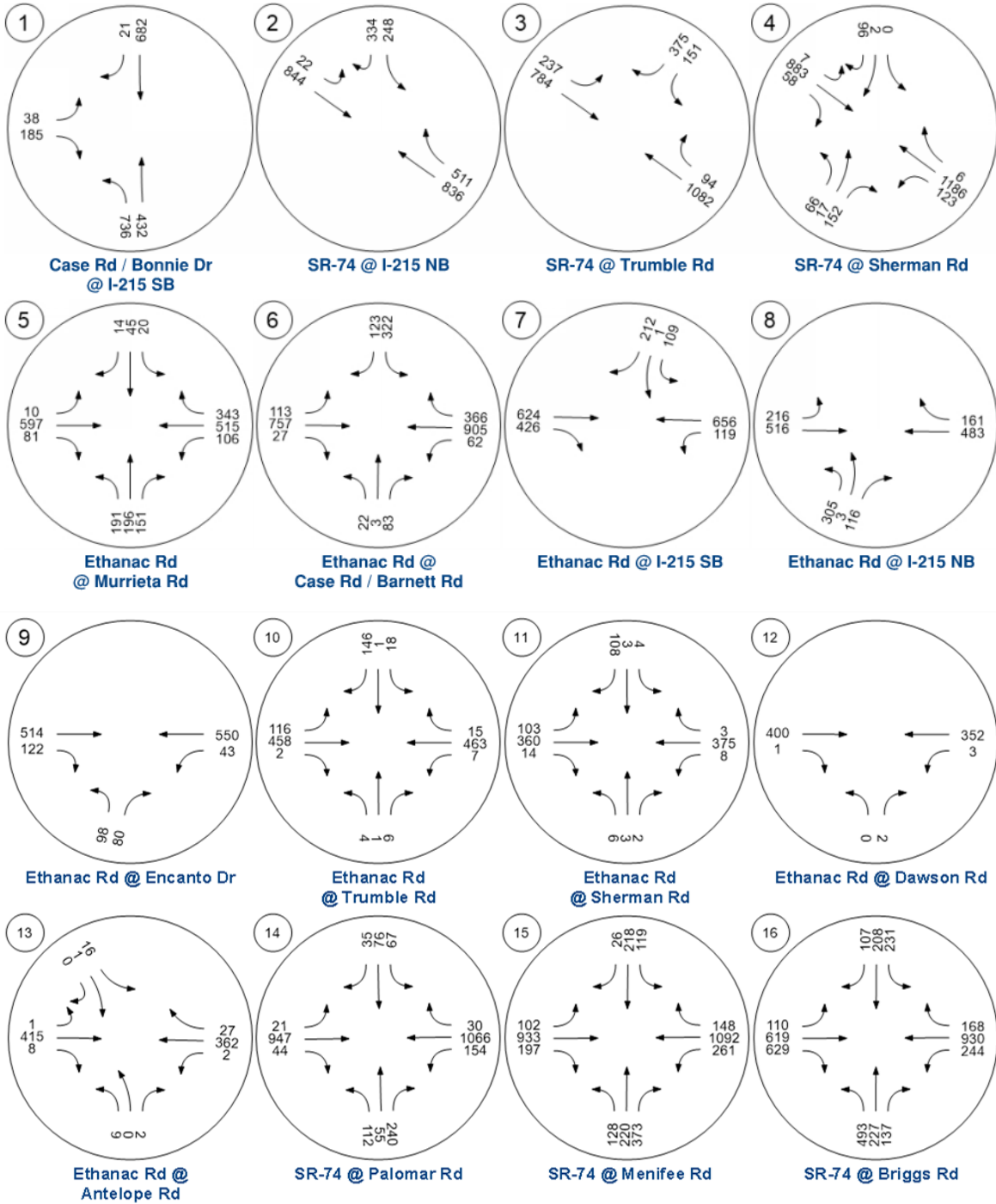


Figure 10 (cont): Existing Traffic Volumes – AM Peak Hour

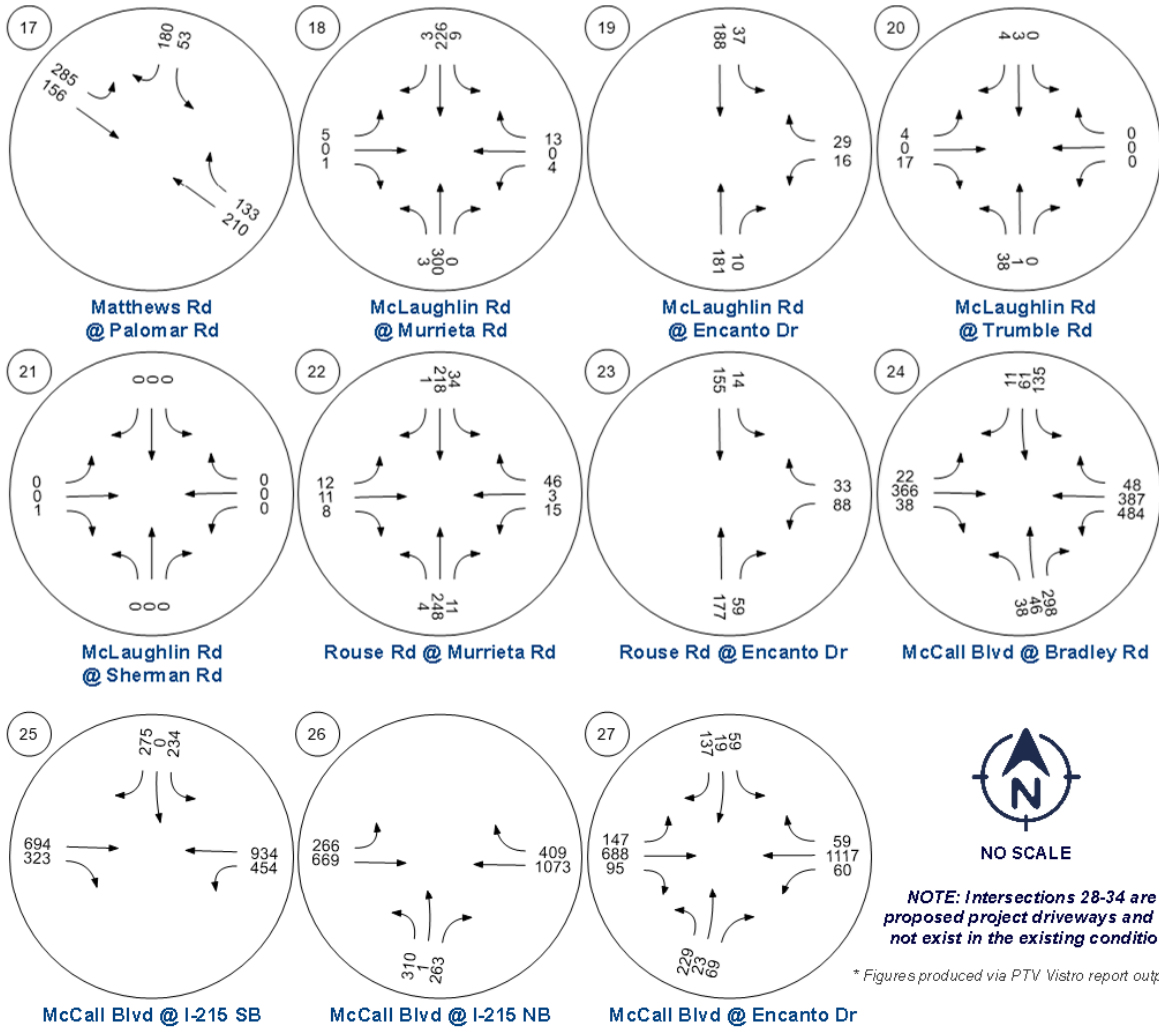


Figure 11: Existing Traffic Volumes - PM Peak Hour

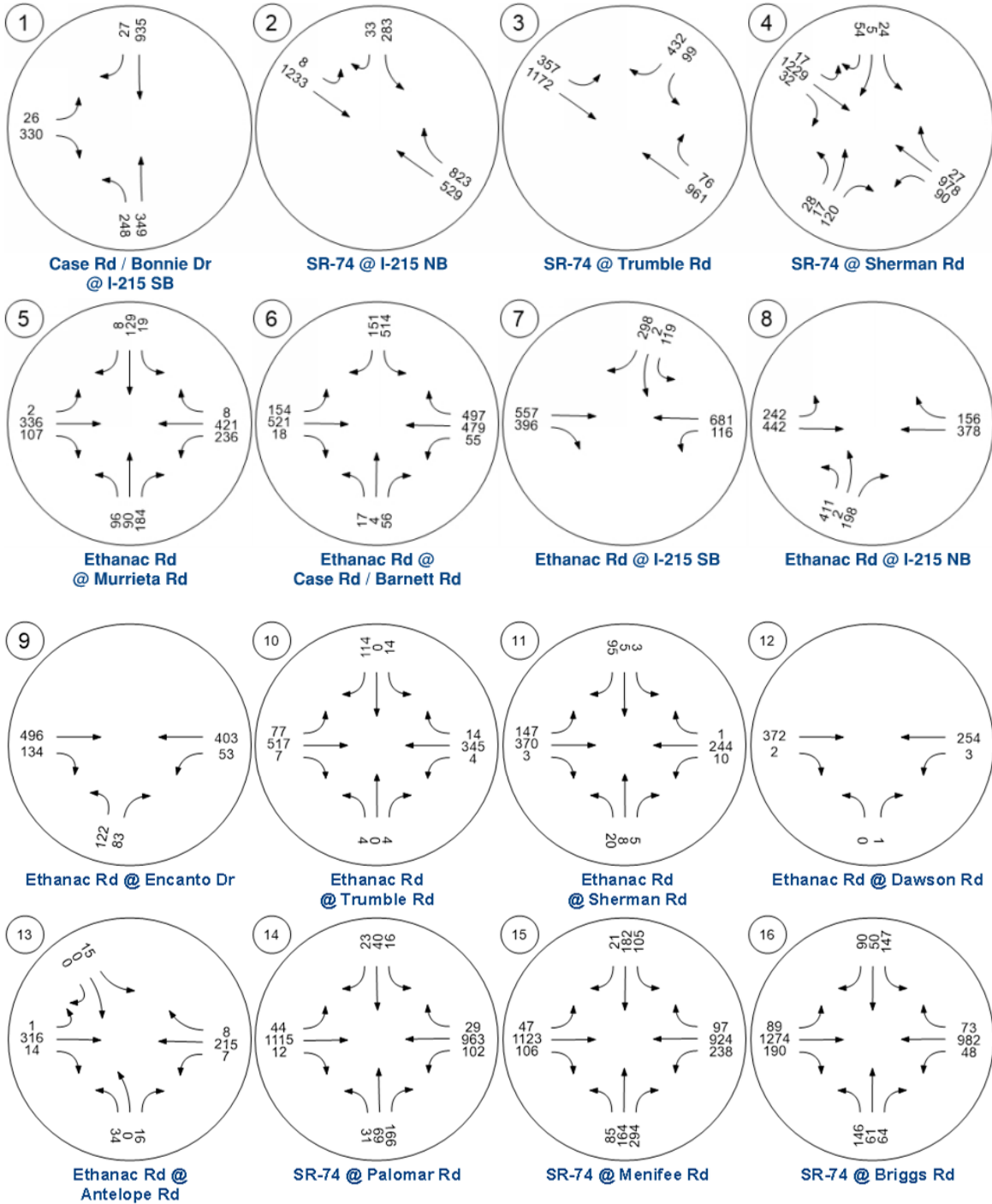
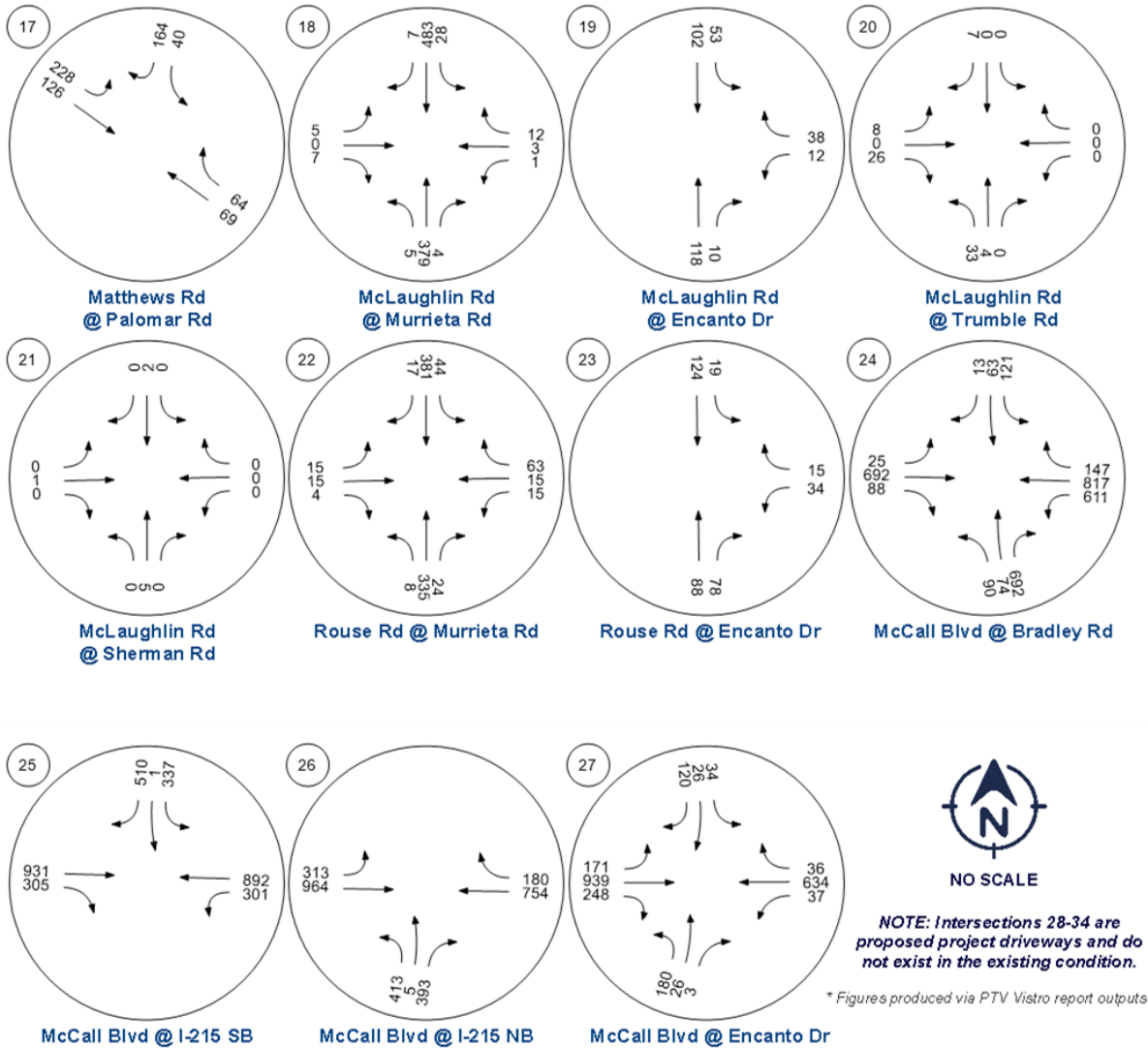


Figure 11 (cont): Existing Traffic Volumes – PM Peak Hour



Levels of Service – Existing Conditions (2021)

Based on the existing intersection geometrics and peak-hour traffic volumes, intersection LOS was analyzed for the AM and PM peak hours (Table 13, see Appendix D for details). Under existing conditions, the following study intersections currently operate below the minimum acceptable LOS standard:

- #1 Case Rd / Bonnie Dr @ I-215 SB (AM peak hour only)
- #9 Ethanac Rd @ Encanto Dr
- #15 SR-74 @ Menifee Rd
- #16 SR-74 @ Briggs Rd (AM peak hour only)

Table 13: Intersection LOS – Existing Conditions (2021)

	Intersection	Traffic Control ¹	AM Peak Hr		PM Peak Hr	
			Delay	LOS ²	Delay	LOS ²
1	Case Rd / Bonnie Dr @ I-215 SB	Signal	60.4	E	26.3	C
2	SR-74 @ I-215 NB	Signal	14.8	B	8.5	A
3	SR-74 @ Trumble Rd	Signal	30.1	C	31.5	C
4	SR-74 @ Sherman Rd	Signal	17.5	B	16.6	B
5	Ethanac Rd @ Murrieta Rd	Signal	22.7	C	22.7	C
6	Ethanac Rd @ Case Rd / Barnett Rd	Signal	18.9	B	23.9	C
7	Ethanac Rd @ I-215 SB	Signal	15.6	B	17.6	B
8	Ethanac Rd @ I-215 NB	Signal	27.9	C	38.8	D
9	Ethanac Rd @ Encanto Dr	TWSC	63.7	F	50.9	F
10	Ethanac Rd @ Trumble Rd	Signal	17.5	B	14.1	B
11	Ethanac Rd @ Sherman Rd	TWSC	29.2	D	28.4	D
12	Ethanac Rd @ Dawson Rd	TWSC	10.7	B	10.7	B
13	Ethanac Rd @ Antelope Rd	TWSC	18.5	C	15	B
14	SR-74 @ Palomar Rd	Signal	15.5	B	13.0	B
15	SR-74 @ Menifee Rd	Signal	107.5	F	72.5	E
16	SR-74 @ Briggs Rd	Signal	144	F	23.3	C
17	Matthews Rd @ Palomar Rd	TWSC	16	C	11.1	B
18	McLaughlin Rd @ Murrieta Rd	TWSC	13.2	B	16.2	C
19	McLaughlin Rd @ Encanto Dr	TWSC	11.0	B	9.7	A
20	McLaughlin Rd @ Trumble Rd	AWSC	7.2	A	7.0	A
21	McLaughlin Rd @ Sherman Rd	TWSC	8.3	A	9.1	A
22	Rouse Rd @ Murrieta Rd	TWSC	13	B	20.3	C
23	Rouse Rd @ Encanto Dr	TWSC	14.1	B	10.5	B
24	McCall Blvd @ Bradley Rd	Signal	20.3	C	47	D
25	McCall Blvd @ I-215 SB	Signal	19	B	30.1	C
26	McCall Blvd @ I-215 NB	Signal	21.6	C	19.8	B
27	McCall Blvd @ Encanto Dr	Signal	27.4	C	16.5	B
28	Sherman Rd @ Project Dwy 1	DOES NOT EXIST				
29	Sherman Rd @ Project Dwy 2	DOES NOT EXIST				
30	Sherman Rd @ Project Dwy 3	DOES NOT EXIST				
31	Trumble Rd @ Project Dwy 4	DOES NOT EXIST				
32	Trumble Rd @ Project Dwy 5	DOES NOT EXIST				
33	Dawson Rd @ Project Dwy 6	DOES NOT EXIST				
34	Dawson Rd @ Project Dwy 7	DOES NOT EXIST				

¹ TWSC = two-way stop control; AWSC = all-way stop control

² Level of service (LOS) rankings based on average control delay (sec/veh) per Highway Control Manual.

X = LOS falls below minimum threshold

V. PROJECT OPENING DAY CONDITIONS (2023)

Proposed Project Driveways

The proposed project site plan includes seven full-access driveways: three on Sherman Road and two each on Trumble Road and Dawson Road, respectively. The driveways are proposed to have side-street stop-control, with one ingress and one egress lane each. The project will also implement roadway improvements along the project frontage, per City comments and General Plan cross-sections. **Figure 12** shows the project driveway geometrics as analyzed in this study, while **Appendix I** shows potential driveway and roadway improvements along the project frontage.

Reference Map: Proposed Project Driveways

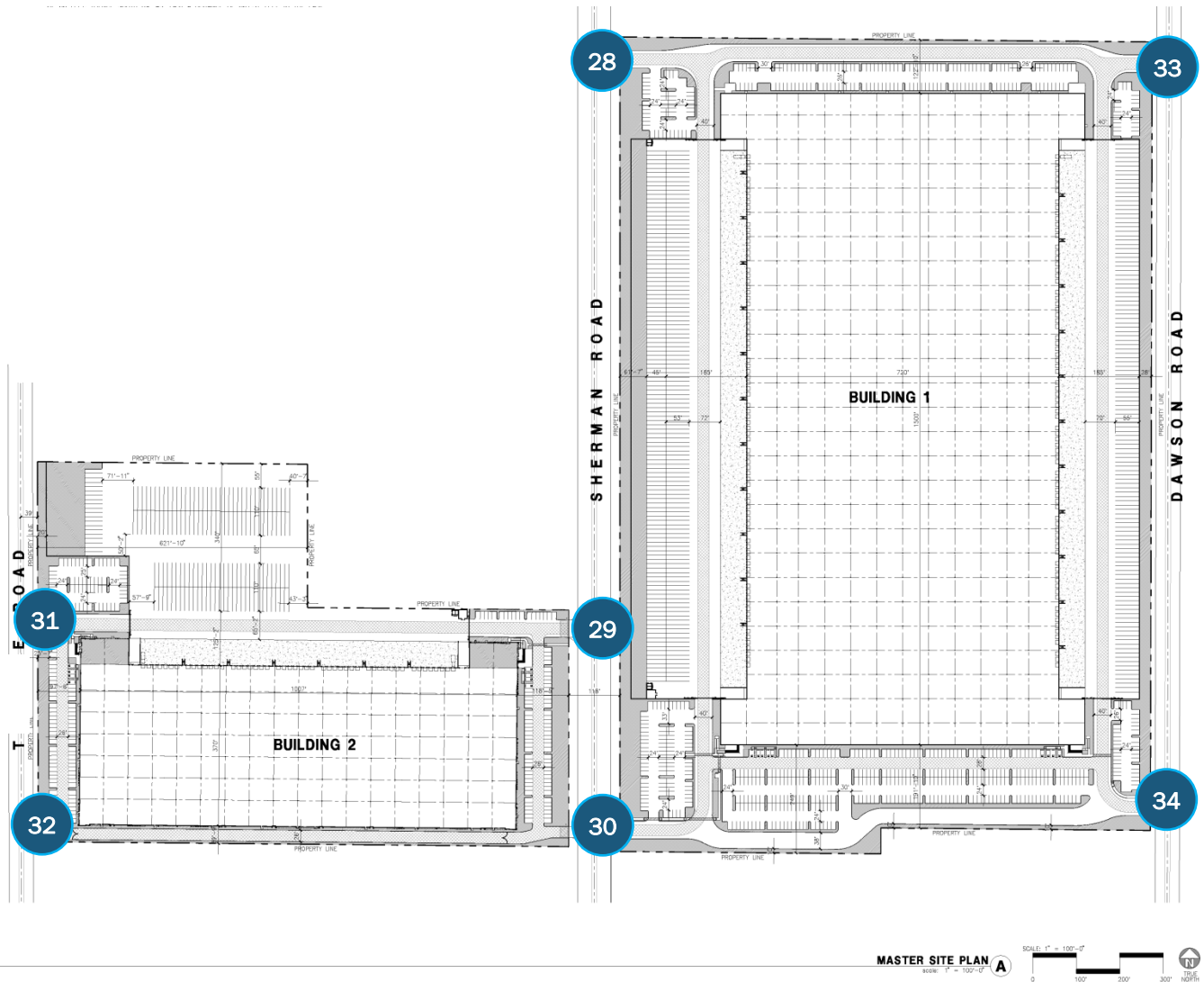
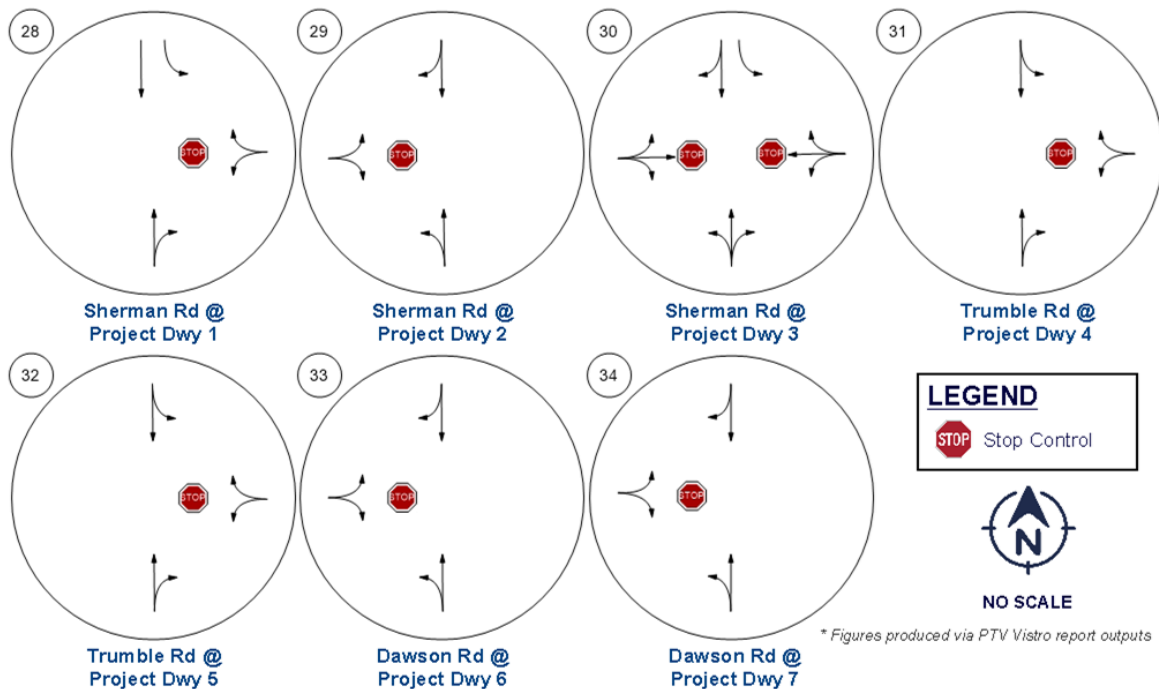


Figure 12: Analyzed Project Driveway Geometrics



Ambient Area Growth

An ambient traffic growth factor is used in future traffic models to account for regular growth in traffic volumes due to the developments within the region. Per the approved scoping agreement (Appendix A), this study uses a 2 percent annual ambient growth rate, for a total of 6% growth from 2021 to 2024.

Levels of Service – Opening Day Conditions (2023)

The expected project traffic is then added to the opening day AM and PM peak-hour traffic volumes (Figures 13 and 14, respectively). Table 14 gives the LOS analysis for the “opening day” scenario, with detailed worksheets in Appendix D. With the addition of ambient area growth and the proposed project traffic, the following study intersections are expected to operate below the minimum acceptable LOS standard:

- #1 Case Rd / Bonnie Dr @ I-215 SB (AM peak hour only)
- #8 Ethanac Rd @ I-215 NB
- #9 Ethanac Rd @ Encanto Dr
- #10 Ethanac Rd @ Trumble Rd (AM peak hour only)
- #11 Ethanac Rd @ Sherman Rd
- #12 Ethanac Rd @ Dawson Rd (PM peak hour only)
- #15 SR-74 @ Menifee Rd
- #16 SR-74 @ Briggs Rd (AM peak hour only)

Reference Map: Study Intersections

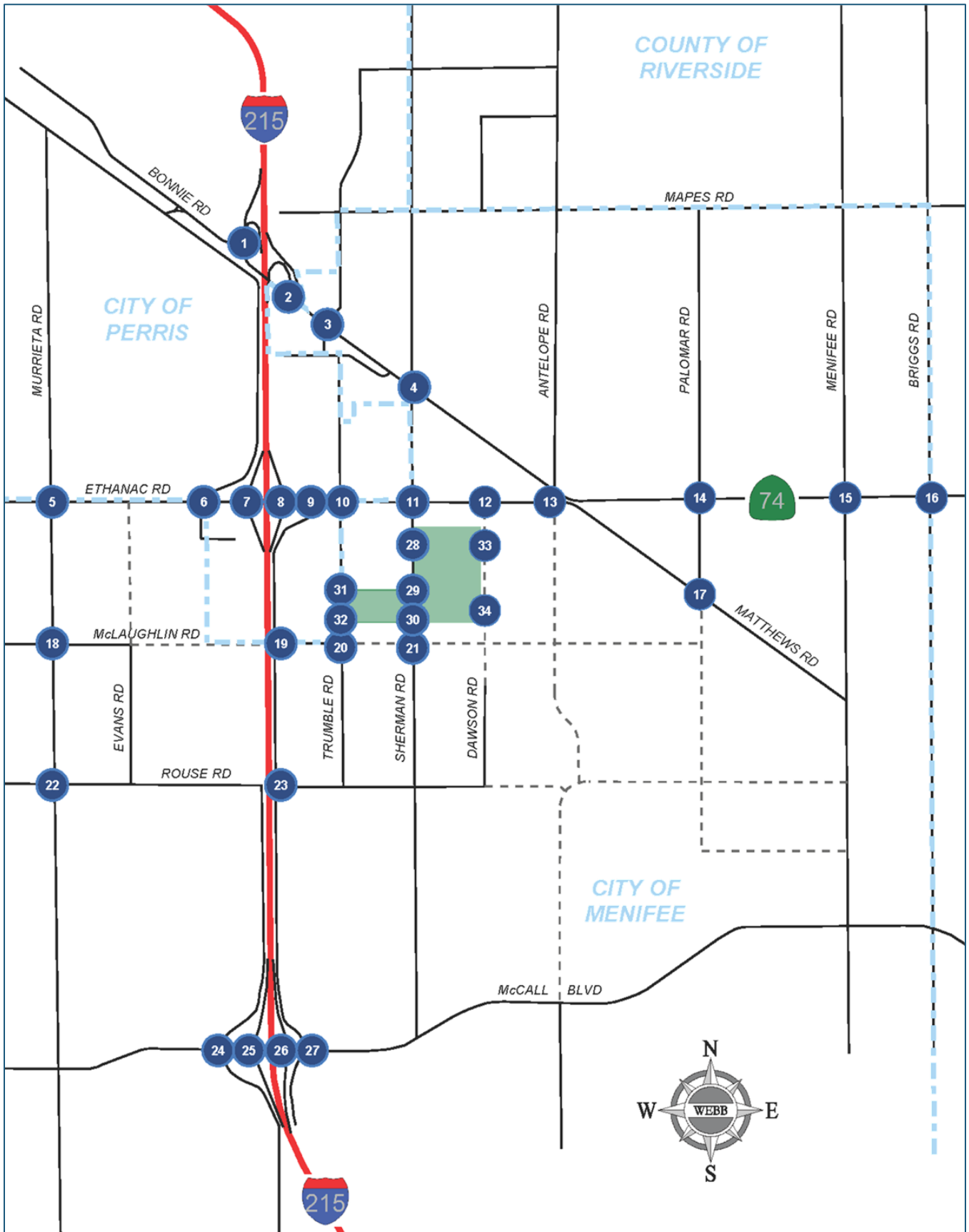


Figure 13: Opening Day Traffic Volumes – AM Peak Hour

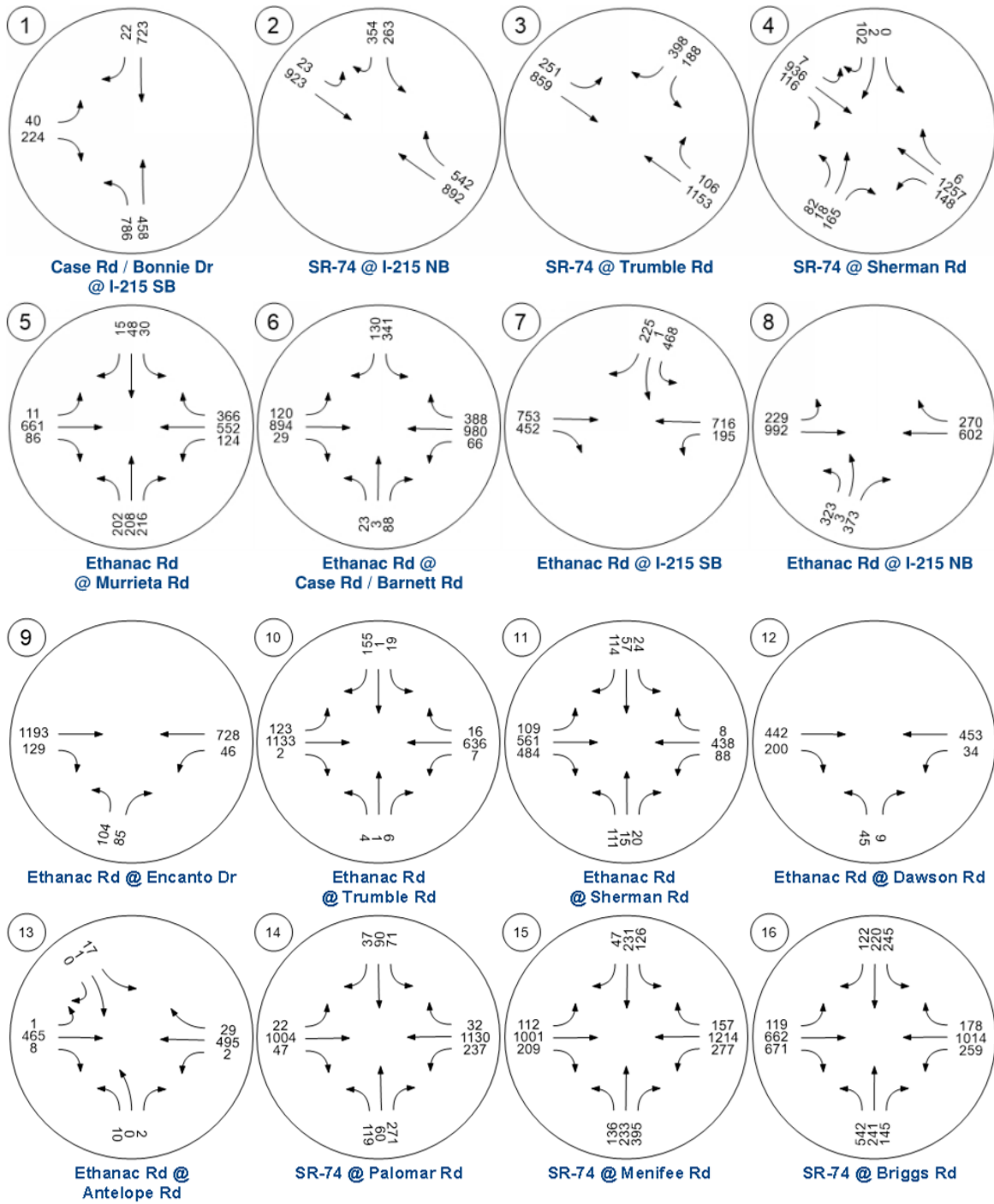


Figure 13 (cont): Opening Day Traffic Volumes – AM Peak Hour

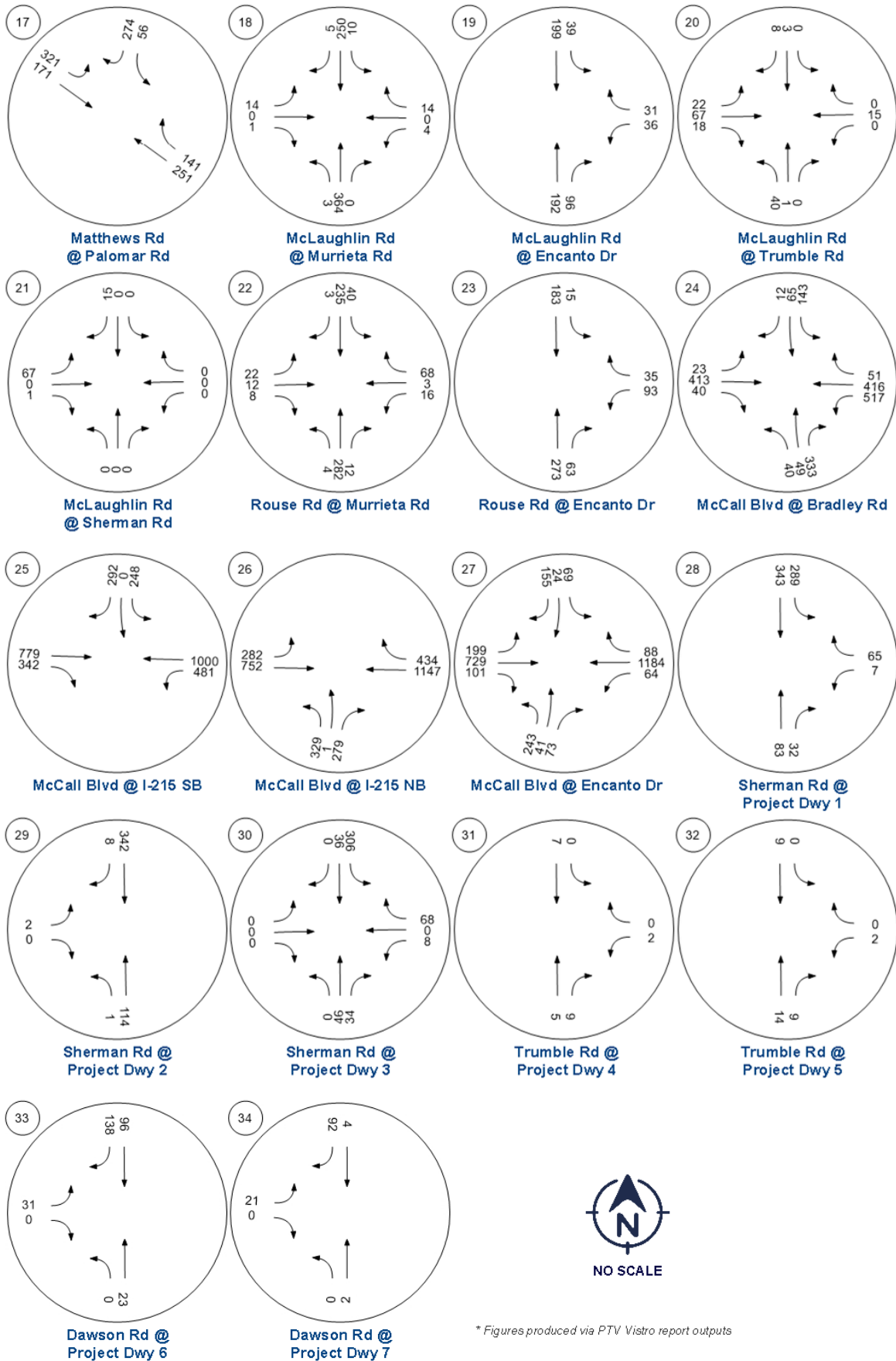


Figure 14: Opening Day Traffic Volumes - PM Peak Hour

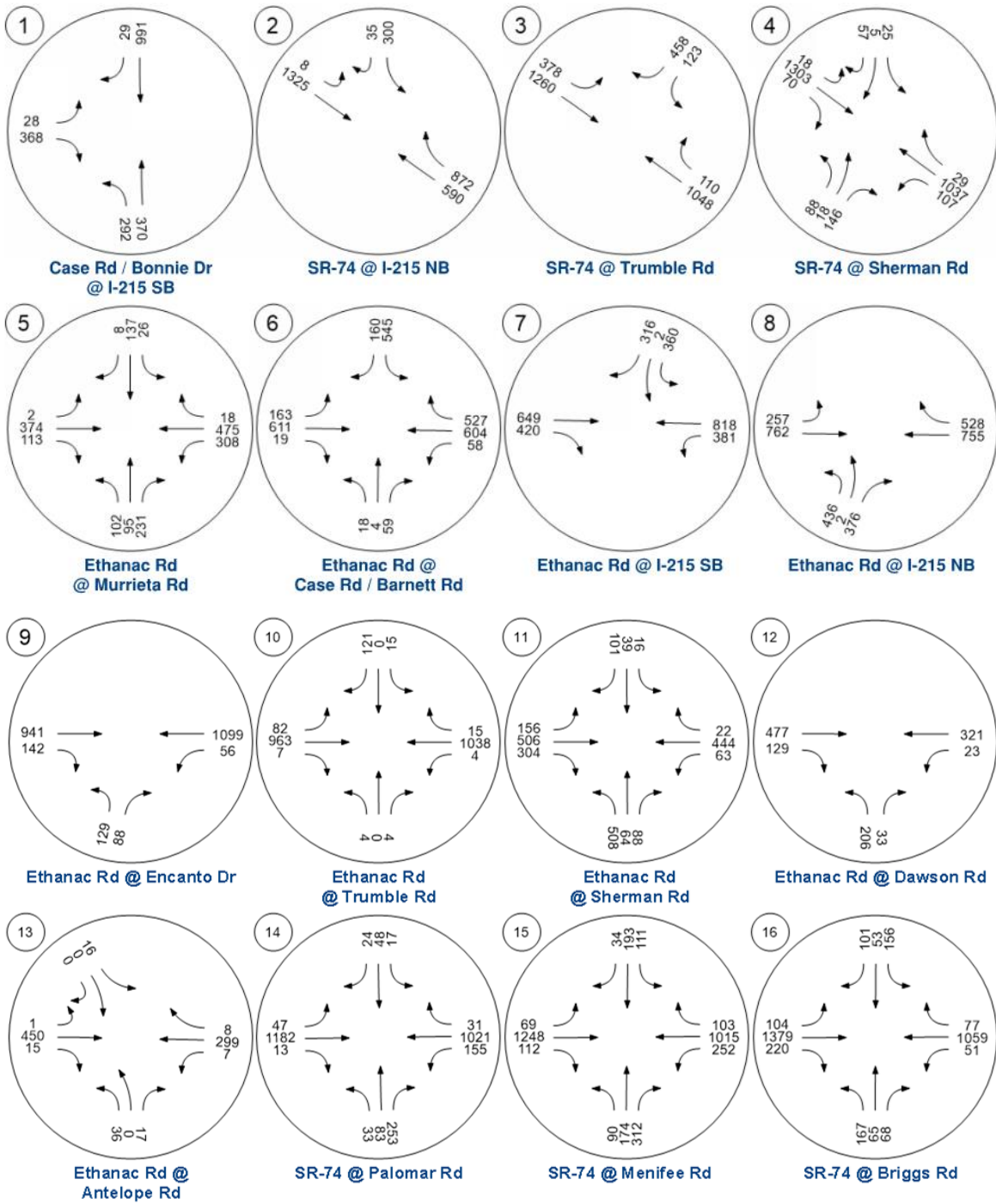


Figure 14 (cont): Opening Day Traffic Volumes – PM Peak Hour

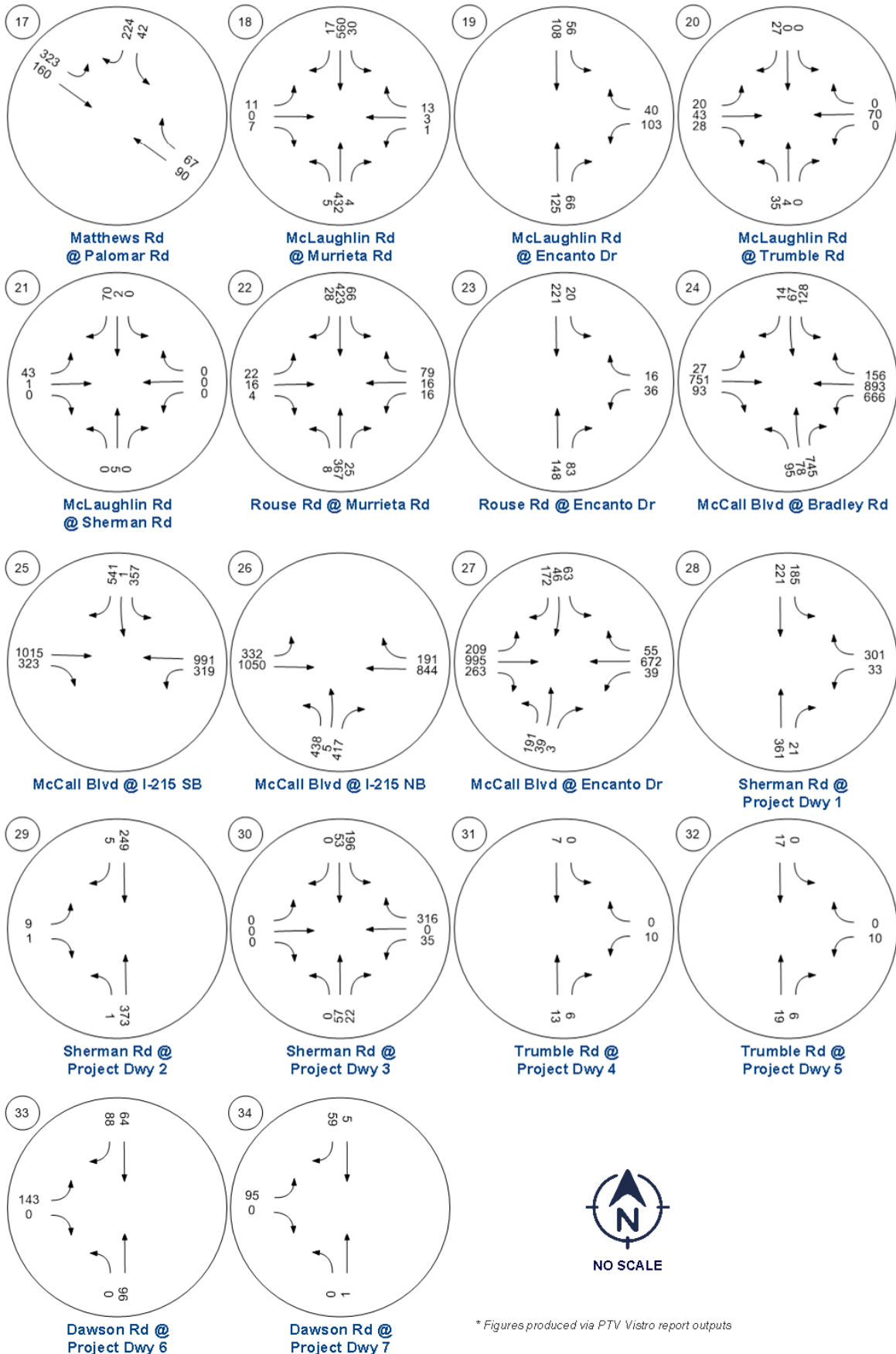


Table 14: Intersection LOS – Opening Day Conditions (2023)

	Intersection	Traffic Control ¹	AM Peak Hr		PM Peak Hr	
			Delay	LOS ²	Delay	LOS ²
1	Case Rd / Bonnie Dr @ I-215 SB	Signal	77.0	E	37.4	D
2	SR-74 @ I-215 NB	Signal	17.2	B	9.3	A
3	SR-74 @ Trumble Rd	Signal	40.8	D	45.8	D
4	SR-74 @ Sherman Rd	Signal	20.3	C	19.0	B
5	Ethanac Rd @ Murrieta Rd	Signal	27.9	C	27.7	C
6	Ethanac Rd @ Case Rd / Barnett Rd	Signal	20.2	C	26.4	C
7	Ethanac Rd @ I-215 SB	Signal	37.6	D	48.3	D
8	Ethanac Rd @ I-215 NB	Signal	81.4	F	172.3	F
9	Ethanac Rd @ Encanto Dr	TWSC	999	F	999	F
10	Ethanac Rd @ Trumble Rd	Signal	59.6	E	24.2	C
11	Ethanac Rd @ Sherman Rd	TWSC	999	F	999	F
12	Ethanac Rd @ Dawson Rd	TWSC	26.6	D	117.8	F
13	Ethanac Rd @ Antelope Rd	TWSC	23.6	C	20.2	C
14	SR-74 @ Palomar Rd	Signal	19.1	B	17.1	B
15	SR-74 @ Menifee Rd	Signal	144.2	F	92.9	F
16	SR-74 @ Briggs Rd	Signal	173.5	F	26.3	C
17	Matthews Rd @ Palomar Rd	TWSC	18.8	C	12.7	B
18	McLaughlin Rd @ Murrieta Rd	TWSC	15.4	C	22.9	C
19	McLaughlin Rd @ Encanto Dr	TWSC	12.9	B	12.2	B
20	McLaughlin Rd @ Trumble Rd	AWSC	7.8	A	7.5	A
21	McLaughlin Rd @ Sherman Rd	TWSC	10.1	B	9.7	A
22	Rouse Rd @ Murrieta Rd	TWSC	14.9	B	26.5	D
23	Rouse Rd @ Encanto Dr	TWSC	16.7	C	11.9	B
24	McCall Blvd @ Bradley Rd	Signal	23.3	C	64.2	E
25	McCall Blvd @ I-215 SB	Signal	22.2	C	36.7	D
26	McCall Blvd @ I-215 NB	Signal	25.3	C	22.8	C
27	McCall Blvd @ Encanto Dr	Signal	48.3	D	21.9	C
28	Sherman Rd @ Project Dwy 1	TWSC	10.5	B	21.1	C
29	Sherman Rd @ Project Dwy 2	TWSC	12.1	B	14.1	B
30	Sherman Rd @ Project Dwy 3	TWSC	20.2	C	21.6	C
31	Trumble Rd @ Project Dwy 4	TWSC	8.6	A	8.7	A
32	Trumble Rd @ Project Dwy 5	TWSC	8.7	A	8.8	A
33	Dawson Rd @ Project Dwy 6	TWSC	9.9	A	11.0	B
34	Dawson Rd @ Project Dwy 7	TWSC	8.9	A	9.2	A

¹ TWSC = two-way stop control; AWSC = all-way stop control

² Level of service (LOS) rankings based on average control delay (sec/veh) per Highway Control Manual.

X = LOS falls below minimum threshold

Recommended Improvements – Opening Day Conditions

With the implementation of the recommended improvements (Section 6), all study intersections are expected to operate at or above the minimum acceptable LOS standard (Table 15, see Appendix D for details).

Table 15: Intersection LOS – Opening Day with Improvements

Intersection	Traffic Control	AM Peak Hr		PM Peak Hr	
		Delay	LOS ¹	Delay	LOS ¹
1 Case Rd / Bonnie Dr @ I-215 SB	Signal	33.8	C	<i>no impact</i>	
8 Ethanac Rd @ I-215 NB	Signal	21.4	C	43.8	D
9 Ethanac Rd @ Encanto Dr	Signal	22.2	C	9.8	A
10 Ethanac Rd @ Trumble Rd	Signal	15.6	B	<i>no impact</i>	
11 Ethanac Rd @ Sherman Rd	Signal	27.7	C	32.8	C
12 Ethanac Rd @ Dawson Rd	Signal	<i>no impact</i>		16.7	B
15 SR-74 @ Menifee Rd	Signal	45.5	D	35.5	D
16 SR-74 @ Briggs Rd	Signal	46.5	D	<i>no impact</i>	

¹ Level of service (LOS) rankings based on average control delay (sec/veh) per Highway Control Manual.

Related Projects Analysis

Related projects are developments within the surrounding area of the proposed project that are anticipated to be completed and contribute vehicle trips to the roadway network by the project's opening year (2023). Compiled from lists provided by the Cities of Menifee and Perris as well as the County of Riverside, the related projects used in this study are shown in **Figure 15** and detailed in **Table 16** as well as **Appendix E**. The expected cumulative project trips are shown in **Figures 16 and 17** for the AM and PM peak hours, respectively.

Figure 15: Cumulative Project Locations

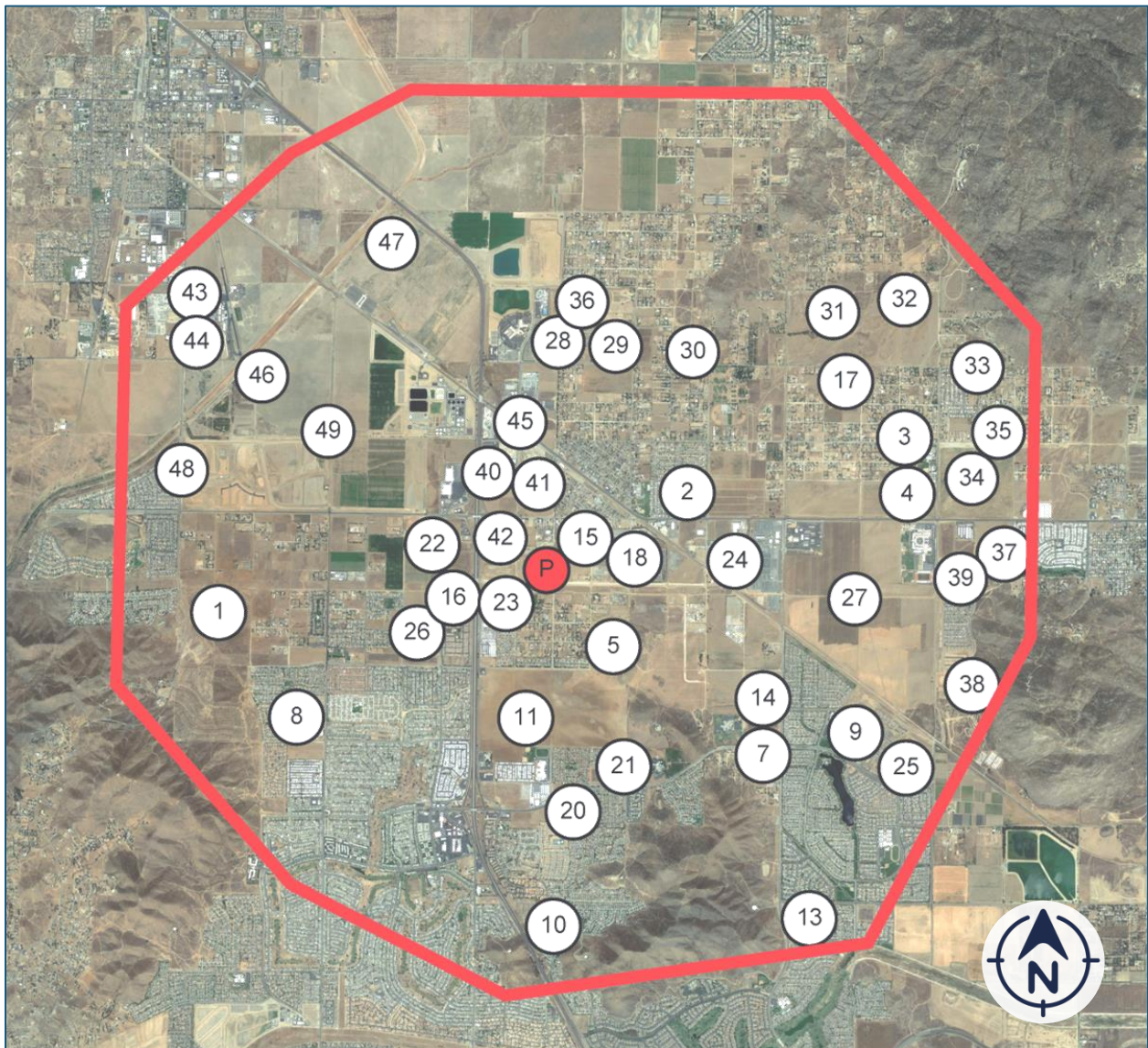


Table 16: Related Projects within the Study Area

Project	Land Use	Size ¹	Trip Generation ²			
			Daily	AM Peak Hr	PM Peak Hr	
City of Menifee						
1 TTM 31856	Single Family Residential	79 DU	746	58	78	
2 TTM 34118	Single Family Residential	85 DU	802	63	84	
3 TTM 33738	Single Family Residential	52 DU	491	38	51	
4 TTM 34600	Multi Family Residential	153 DU	1,444	113	151	
5 TTM 29777	Single Family Residential	173 DU	1,633	128	171	
6 TTM 29835	Single Family Residential	264 DU	2,492	195	261	
7 CUP 3549 / 2017-089	Supermarket	43.8 TSF	4,677	167	405	
	Retail	47 TSF	1,774	44	179	
	Fast Food w. Drive-Thru	3.8 TSF	1,790	153	124	
	Gas Station w. Convenience Store	6 VFP	1,232	75	84	
	Automated Car Wash	1 CWT	780	-	78	
	<i>Internal Capture (10%)</i>			-1,025	-44	-87
	<i>Supermarket Pass-by (PM 36%)</i>			-	-	-131
	<i>Gas Station Pass-by (AM 62%, PM 59%)</i>			-	-42	-45
	<i>Retail Pass-by (PM 34%)</i>			-	-	-55
	<i>Fast Food Pass-by (AM 49%, PM 50%)</i>			-	-67	-56
	<i>Total</i>			9,228	286	497
8 TTM 31456	Single Family Residential	177 DU	1,671	131	175	
9 TTM 34406	Single Family Residential	817 DU	7,712	605	809	
10 PP 19469	Single Family Residential	221 DU	2,086	164	219	
11 SP 2009-025	Single Family Residential	1,080 DU	10,148	796	1,064	
	Shopping Center	225 TSF	8,494	212	857	
	<i>Internal Capture (10%)</i>			-1,864	-101	-192
	<i>Retail Pass-by (PM 34%)</i>			-	-	-262
	<i>Total</i>			16,778	907	1,467
12 2012-120	Shopping Center	208 TSF	7,852	196	792	
	<i>Retail Pass-by (PM 34%)</i>			-	-	-242
	<i>Total</i>			7,852	196	792
13 TM 31582	Single Family Residential	40 DU	378	30	40	
14 PP 2014-189	Single Family Residential	240 DU	2,266	178	238	
15 PP 2011-093	Light Industrial	97.5 TSF	329	39	39	
16 TR 2015-250	Single Family Residential	126 DU	1,189	93	125	
17 TR 31536	Single Family Residential	44 DU	415	33	33	
18 2011-003	Light Industrial	21.7 TSF	73	9	9	
19 2016-110 CUP	Fast Food w. Drive-Thru	2.4 TSF	1,130	96	78	
	<i>Fast Food Pass-by (AM 49%, PM 50%)</i>			-565	-48	-39
	<i>Total</i>			565	48	39

¹ CWT = Car Wash Tunnel; TSF = Thousand Square Feet; VFP = Vehicle Fueling Positions; DU = Dwelling Unit

² Trip generation based on ITE Trip Generation Manual 10th Edition

Table 16 (cont): Related Projects within the Study Area

Project	Land Use	Size ¹	Trip Generation ²		
			Daily	AM Peak Hr	PM Peak Hr
City of Menifee (cont.)					
20 PP 2016-124	Shopping Center	18.2 TSF	687	17	69
	<i>Retail Pass-by (PM 34%)</i>		-	-	-23
	<i>Total</i>		687	17	46
21 2016-183 CUP	Assisted Living	45.2 TSF	189	18	22
22 CUP 2017-060	Gas Station w. Convenience Store	16 VFP	3,286	200	224
	Car Wash	2 CWT	-	-	155
	Fast Food w. Drive-Thru	4.3 TSF	2,025	173	140
	<i>Internal Capture (10%)</i>		-531	-37	-52
	<i>Gas Station Pass-by (AM 62%, PM 59%)</i>		-	-112	-119
	<i>Fast Food Pass-by (AM 49%, PM 50%)</i>		-	-76	-63
	<i>Total</i>		4,780	148	285
23 2016-233 CUP	Automobile Sales	17.6 TSF	490	33	43
24 CUP 2016-263	Light Industrial	12.3 TSF	61	9	8
25 2016-139 TR (Heritage Lake SP)	Single Family Residential	40 DU	378	30	40
26 TR 37400/2018-065	Single Family Residential	174 DU	1,643	129	172
27 Menifee Valley SP			24,346	1,948	2,316
County of Riverside					
28 TR25901	Single Family Residential	152 DU	1,435	112	150
29 TTM 37358	Single Family Residential	154 DU	1,454	114	152
30 TR31687	Single Family Residential	65 DU	614	48	64
31 TR35045	Single Family Residential	712 DU	6,721	527	705
32 SP00344	Single Family Residential	796 DU	7,514	589	583
33 TR24936	Single Family Residential	41 DU	387	30	41
34 TR29322	Single Family Residential	202 DU	1,907	149	200
35 TTM37533	Single Family Residential	363 DU	3,427	269	359
36 TR37728	Single Family Residential	234 DU	2,209	173	232
37 TR30972	Single Family Residential	91 DU	859	67	90
38 TR36430	Single Family Residential	340 DU	3,210	252	337
39 SP360A3	Residential		4,063	249	306

¹ CWT = Car Wash Tunnel; TSF =Thousand Square Feet; VFP = Vehicle Fueling Positions; DU = Dwelling Unit

² Trip generation based on ITE Trip Generation Manual 10th Edition

Table 16 (cont): Related Projects within the Study Area

Project	Land Use	Size ¹	Trip Generation ²		
			Daily	AM Peak Hr	PM Peak Hr
City of Perris					
40 Classic Pacific (PUD)	Industrial Park	388 TSF	1,307	155	155
41 Quick Quick Carwash	Car Wash	4 TSF	-	-	42
42 Motte Town Center	Retail	484 TSF	18,271	455	1,844
	<i>Retail Pass-by (PM 34%)</i>		-	-	-627
	<i>Total</i>		18,271	455	1,217
43 IDI Site 1	Warehouse	784 TSF	1,088	63	78
44 IDI Site 2	Warehouse	3,449 TSF	2,564	362	326
45 Marijuana Manufacturing	Manufacturing	12 TSF	3,032	125	262
46 Tract 32666 WSI Mojave Inc	Single Family Residential	665 DU	6,278	492	658
47 Tract 33973 County Lands PIP IV	Single Family Residential	384 DU	3,625	284	380
48 Green Valley SP Tract 37223	Single Family Residential	258 DU	2,436	191	255
49 Green Valley SP Tract 37262	Single Family Residential	212 DU	2,001	157	210

¹ TSF =Thousand Square Feet; VFP = Vehicle Fueling Positions; DU = Dwelling Unit

² Trip generation based on ITE Trip Generation Manual 10th Edition

Figure 16: Cumulative Project Trips – AM Peak Hour

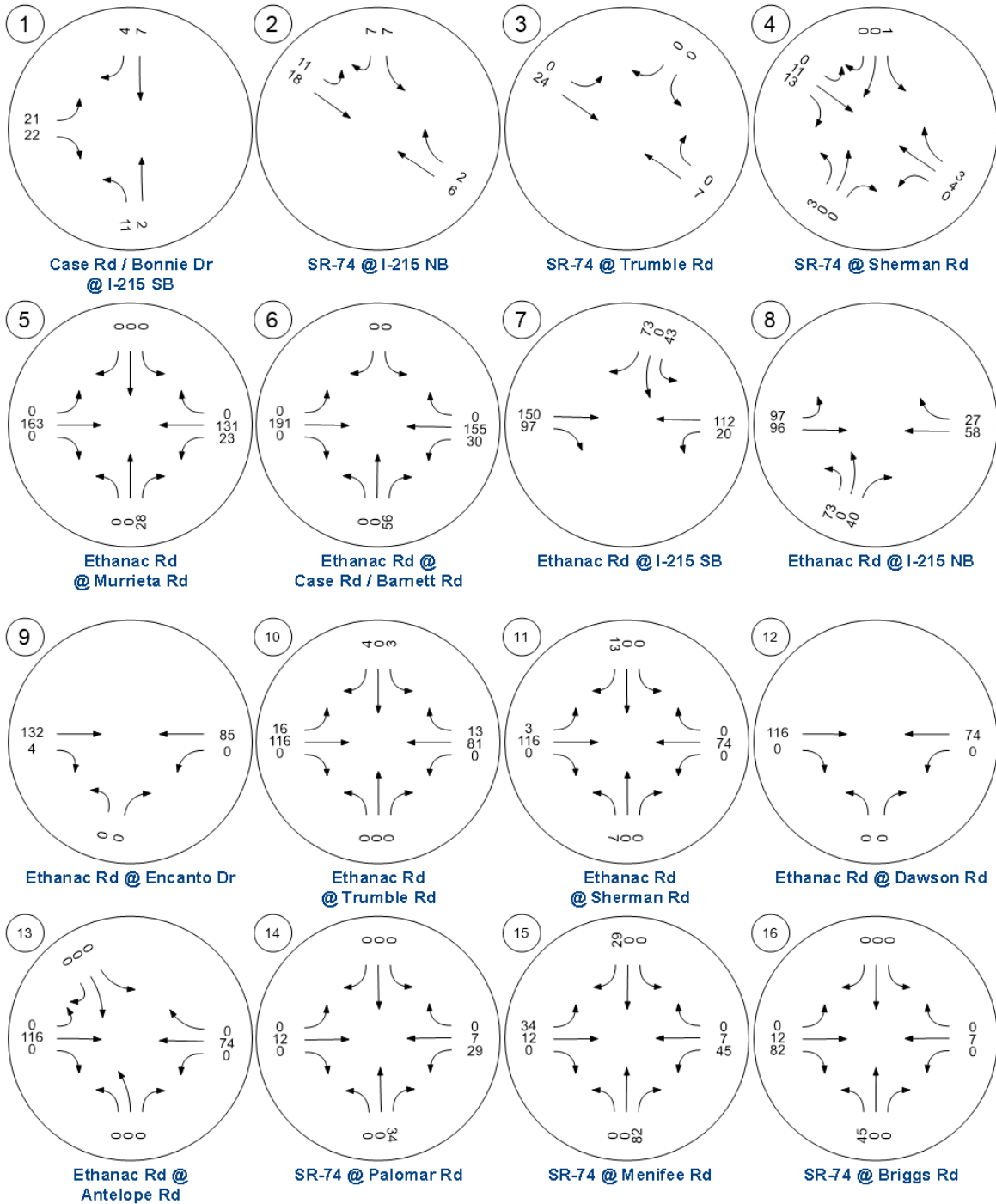
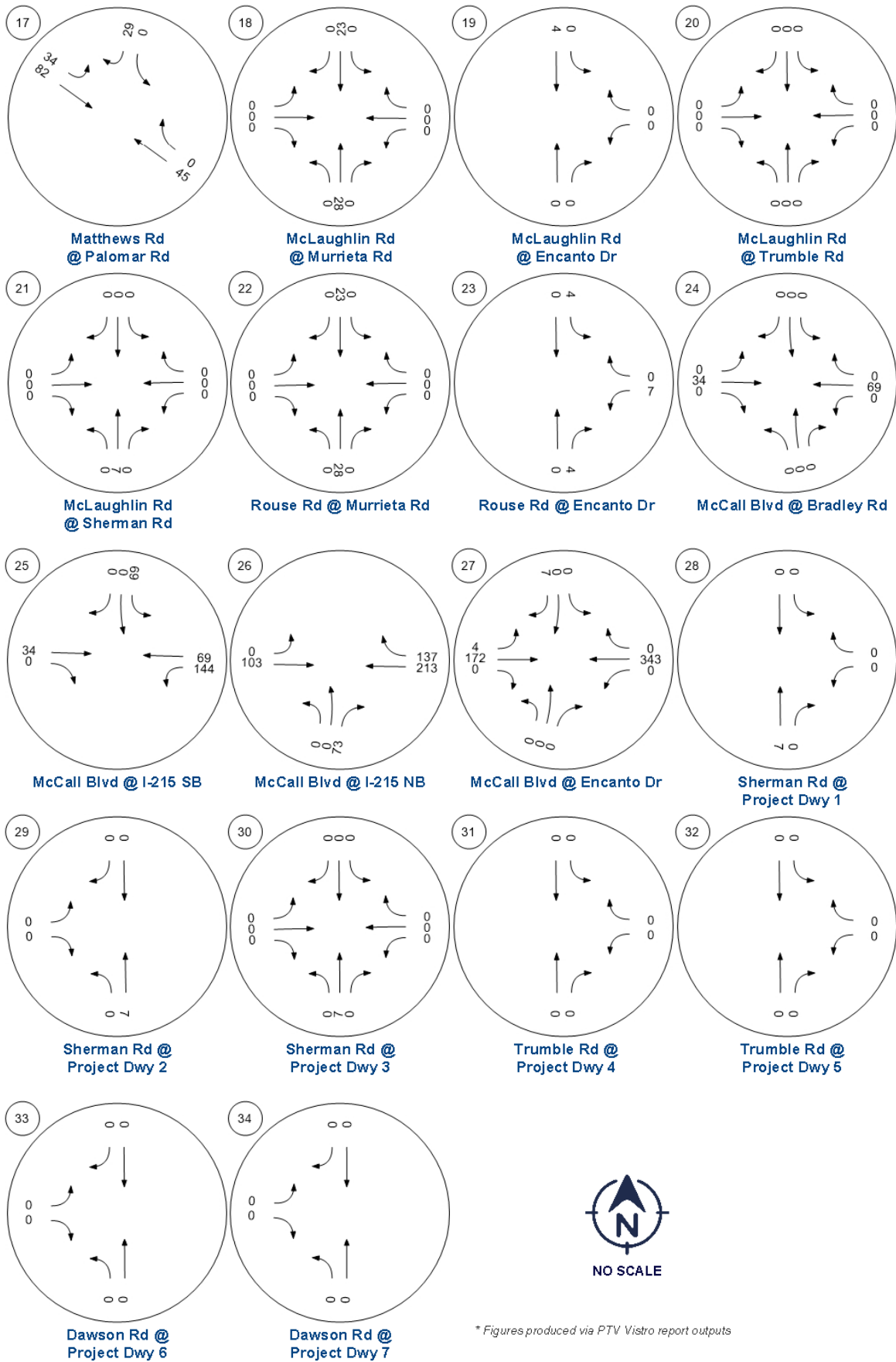


Figure 16 (cont): Cumulative Project Trips - AM Peak Hour



* Figures produced via PTV Vistro report outputs

Figure 17: Cumulative Project Trips – PM Peak Hour

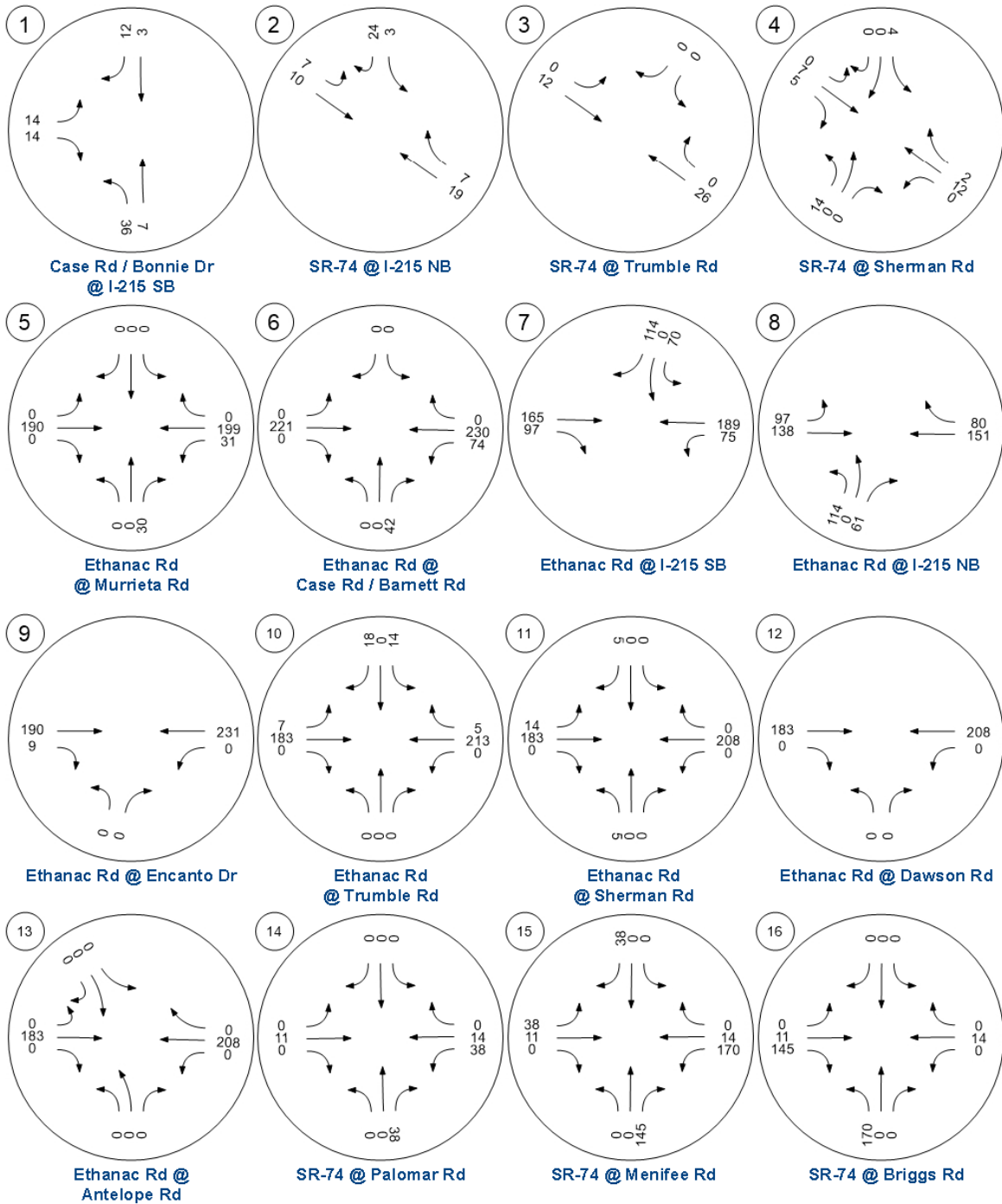
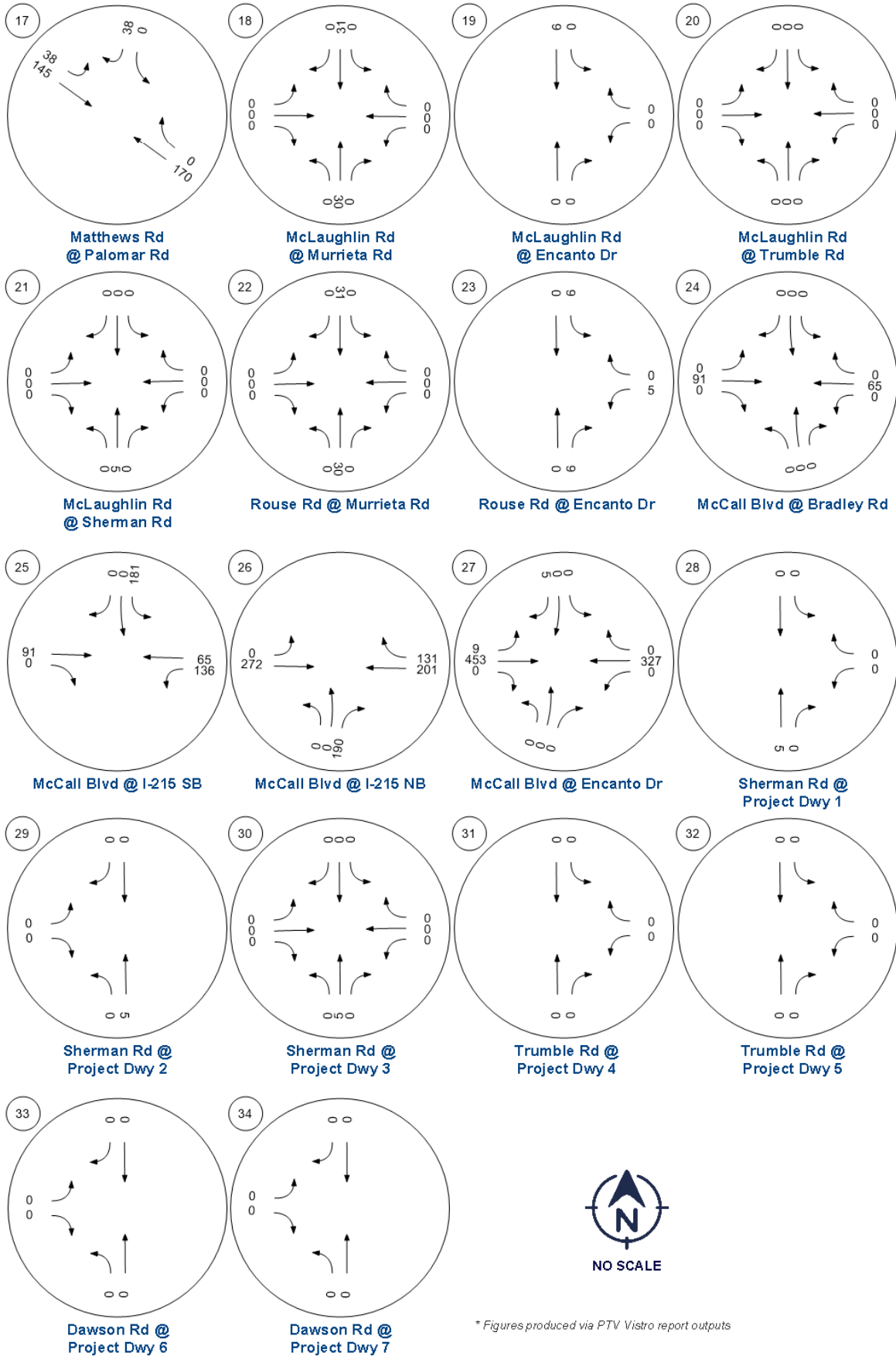


Figure 17 (cont): Cumulative Project Trips - PM Peak Hour



* Figures produced via PTV Vistro report outputs

Levels of Service – Opening Day with Cumulative Projects

The cumulative projects traffic is then added to the opening day traffic volumes (existing traffic + ambient growth + project). The AM and PM peak-hour traffic volumes for the “opening day with cumulative projects” scenario are shown on **Figures 18 and 19**, respectively.

Table 17 summarizes the “opening day with cumulative projects” LOS analysis, with detailed worksheets in **Appendix D**. With the addition of traffic from ambient area growth, nearby cumulative projects, and the proposed project, the following intersections are expected to operate below the minimum acceptable LOS standard:

- #1 Case Rd / Bonnie Dr @ I-215 SB (AM peak hour only)
- #7 Ethanac Rd @ I-215 SB
- #8 Ethanac Rd @ I-215 NB
- #9 Ethanac Rd @ Encanto Dr
- #10 Ethanac Rd @ Trumble Rd (AM peak hour only)
- #11 Ethanac Rd @ Sherman Rd
- #12 Ethanac Rd @ Dawson Rd
- #13 Ethanac Rd @ Antelope Rd (PM peak hour only)
- #15 SR-74 @ Menifee Rd
- #16 SR-74 @ Briggs Rd (AM peak hour only)
- #25 McCall Blvd @ I-215 SB (PM peak hour only)

Figure 18: Opening Day with Cumulative Projects Traffic Volumes – AM Peak Hour

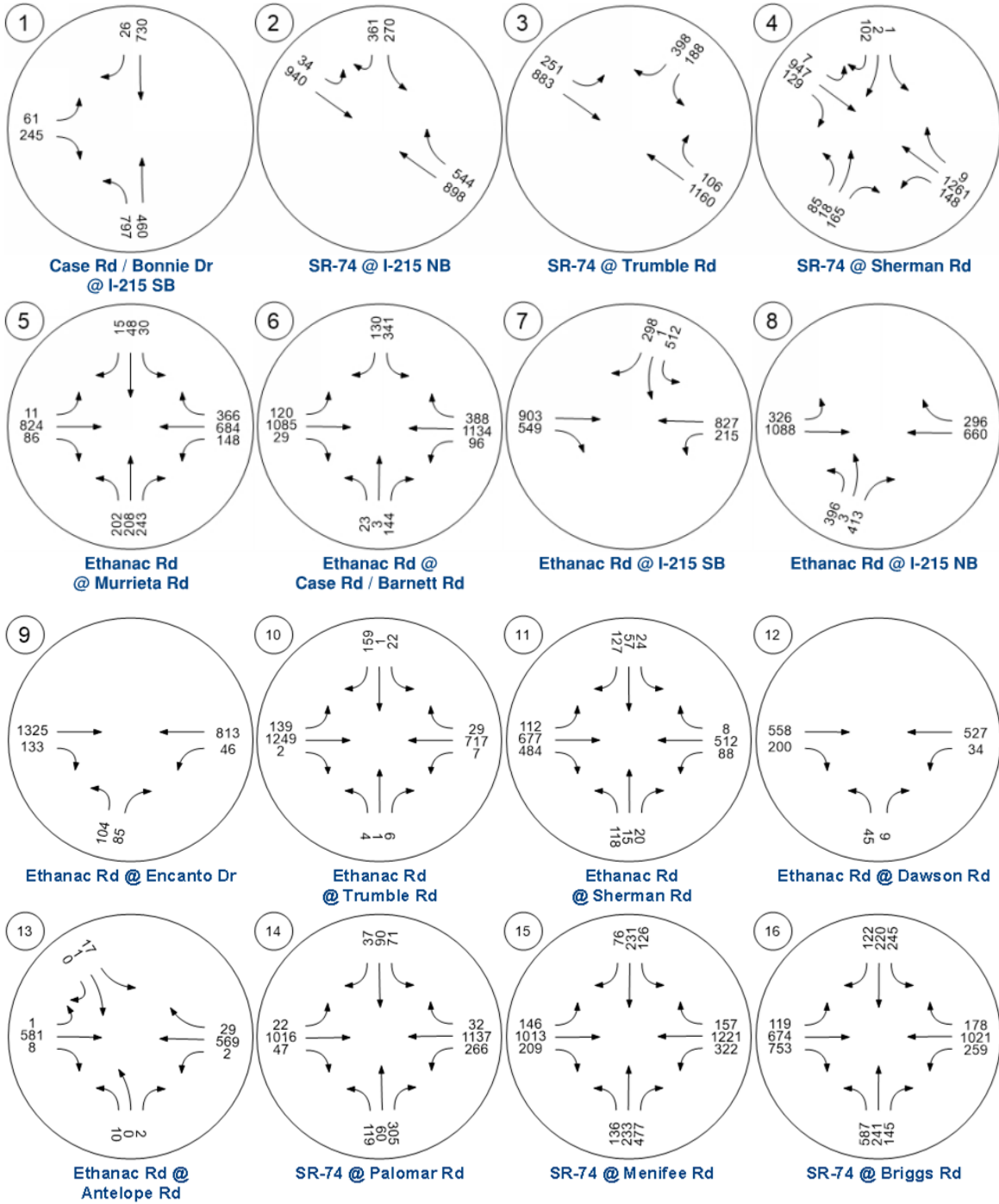
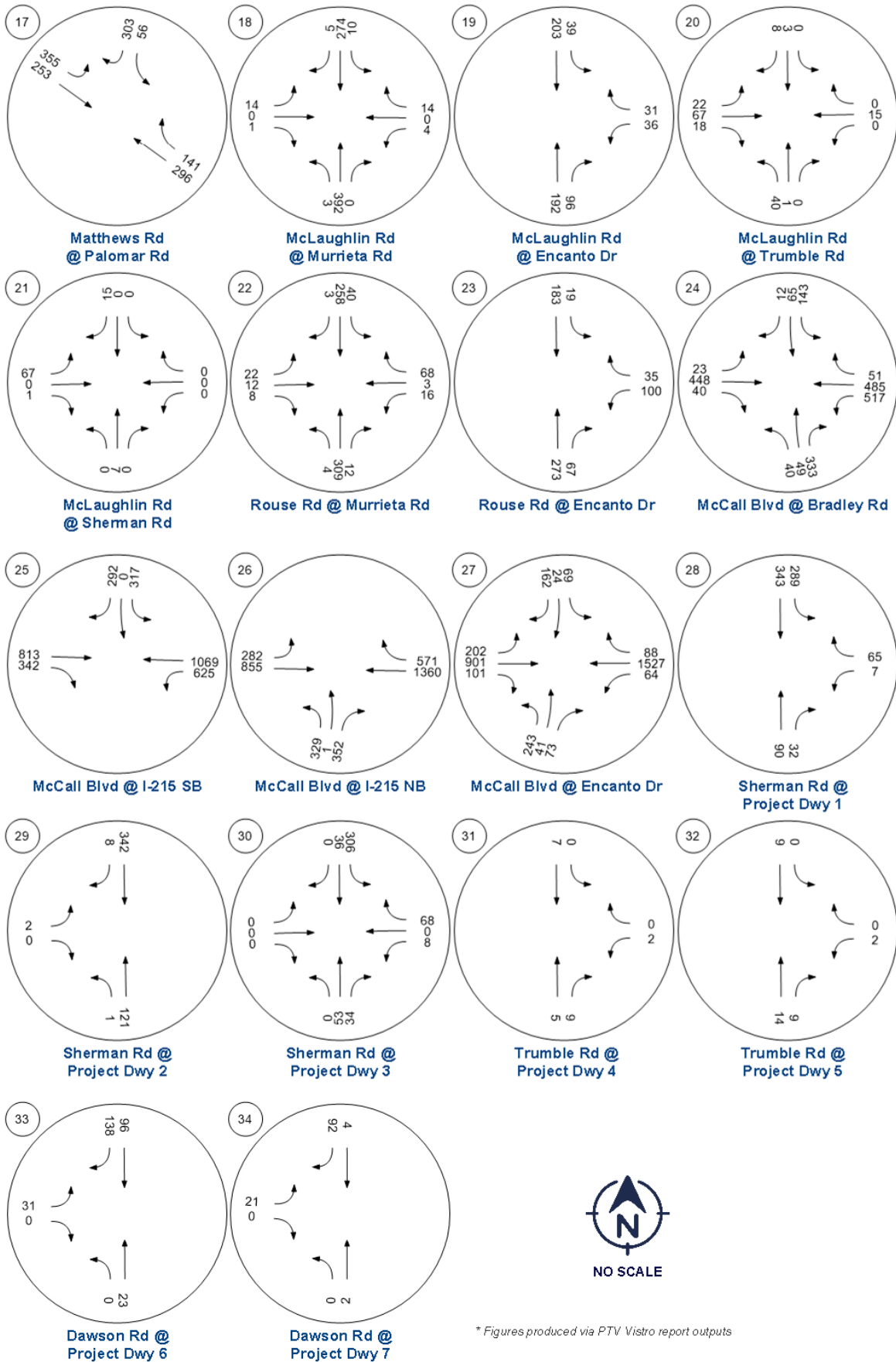


Figure 18 (cont): Opening Day with Cumulative Projects Traffic Volumes – AM Peak Hour



* Figures produced via PTV Vistro report outputs

Figure 19: Opening Day with Cumulative Projects Traffic Volumes – PM Peak Hour

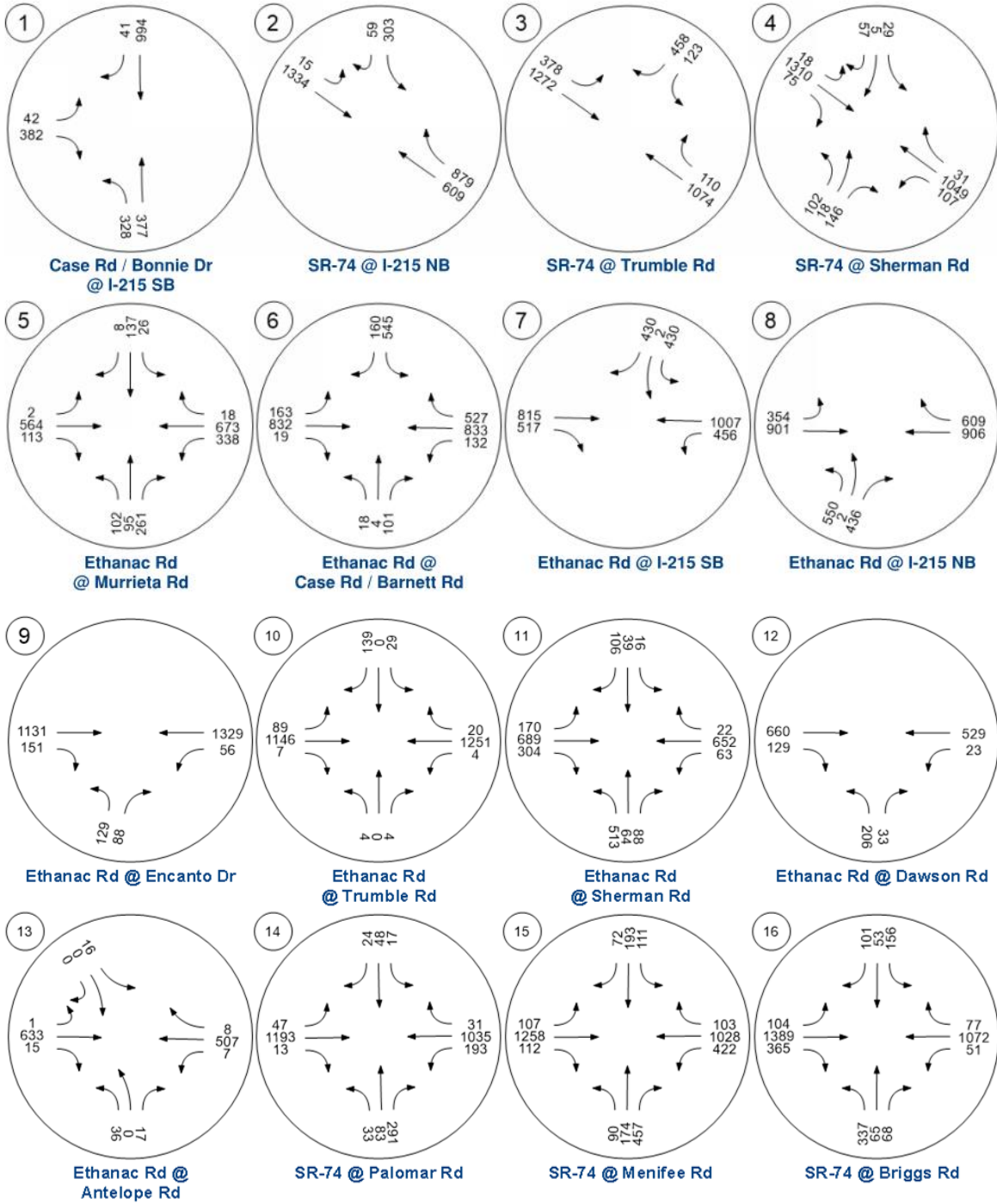
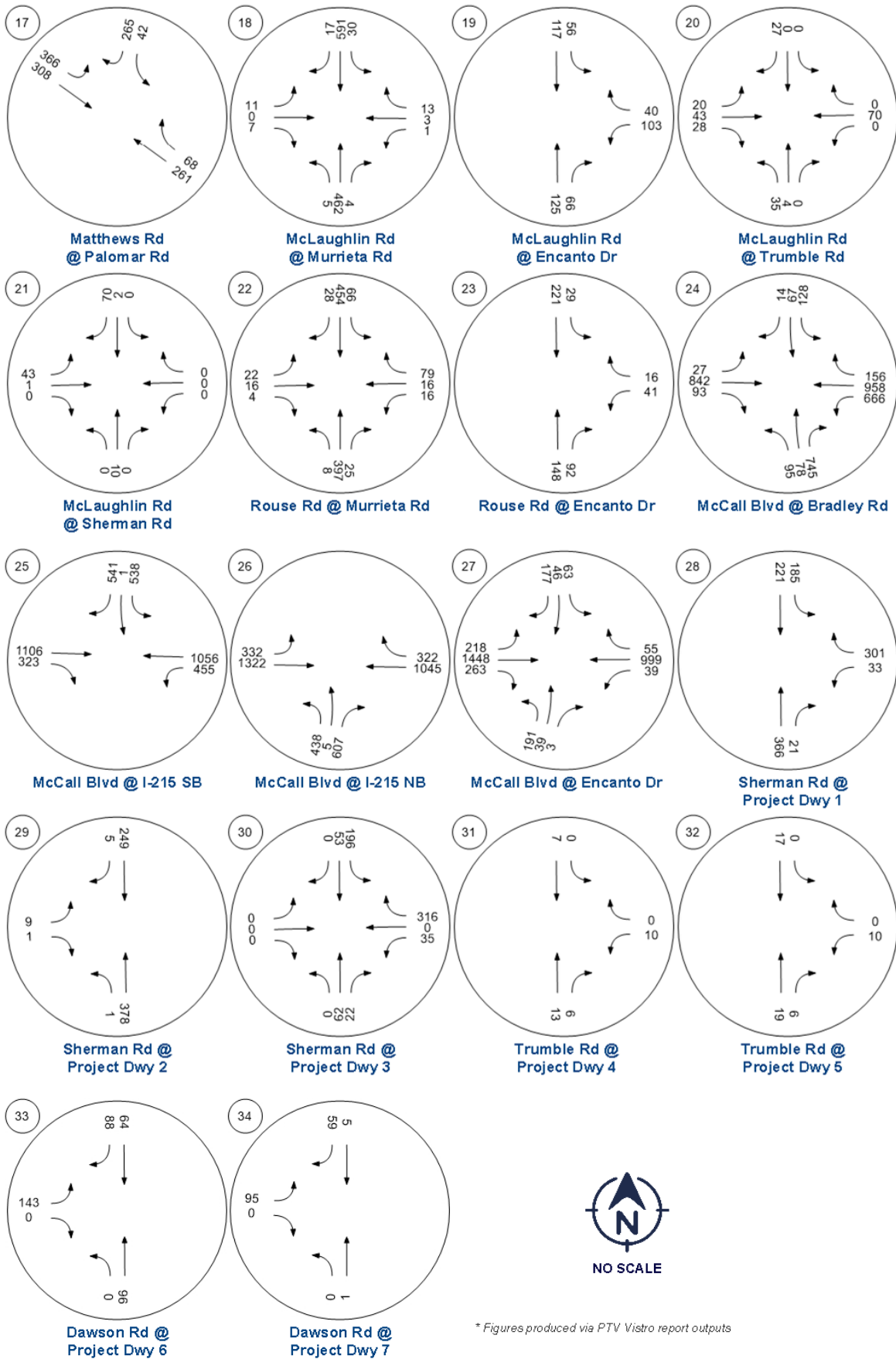


Figure 19 (cont): Opening Day with Cumulative Projects Traffic Volumes – PM Peak Hour



* Figures produced via PTV Vistro report outputs

Table 17: Intersection LOS – Opening Day Conditions with Cumulative Projects (2024)

	Intersection	Traffic Control ¹	AM Peak Hr		PM Peak Hr	
			Delay	LOS ²	Delay	LOS ²
1	Case Rd / Bonnie Dr @ I-215 SB	Signal	85.1	F	40.9	D
2	SR-74 @ I-215 NB	Signal	19.0	B	10.1	B
3	SR-74 @ Trumble Rd	Signal	41.3	D	47.9	D
4	SR-74 @ Sherman Rd	Signal	20.8	C	22.8	C
5	Ethanac Rd @ Murrieta Rd	Signal	36.5	D	35.6	D
6	Ethanac Rd @ Case Rd / Barnett Rd	Signal	25.3	C	30.6	C
7	Ethanac Rd @ I-215 SB	Signal	61.7	E	87.5	F
8	Ethanac Rd @ I-215 NB	Signal	100.9	F	295.9	F
9	Ethanac Rd @ Encanto Dr	TWSC	999	F	999	F
10	Ethanac Rd @ Trumble Rd	Signal	98.1	F	52.6	D
11	Ethanac Rd @ Sherman Rd	TWSC	999	F	999	F
12	Ethanac Rd @ Dawson Rd	TWSC	37.6	E	516.2	F
13	Ethanac Rd @ Antelope Rd	TWSC	31.3	D	41.7	E
14	SR-74 @ Palomar Rd	Signal	22.1	C	20.6	C
15	SR-74 @ Menifee Rd	Signal	187.3	F	195.6	F
16	SR-74 @ Briggs Rd	Signal	201.3	F	37.4	D
17	Matthews Rd @ Palomar Rd	TWSC	25.7	D	19.5	C
18	McLaughlin Rd @ Murrieta Rd	TWSC	16.7	C	24.8	C
19	McLaughlin Rd @ Encanto Dr	TWSC	14.6	B	12.3	B
20	McLaughlin Rd @ Trumble Rd	AWSC	7.8	A	7.5	A
21	McLaughlin Rd @ Sherman Rd	TWSC	10.4	B	9.8	A
22	Rouse Rd @ Murrieta Rd	TWSC	17.9	C	29.3	D
23	Rouse Rd @ Encanto Dr	TWSC	18.4	C	12.4	B
24	McCall Blvd @ Bradley Rd	Signal	23.8	C	72.6	E
25	McCall Blvd @ I-215 SB	Signal	35.2	D	66.7	E
26	McCall Blvd @ I-215 NB	Signal	47.5	D	46.4	D
27	McCall Blvd @ Encanto Dr	Signal	49.0	D	49.3	D
28	Sherman Rd @ Project Dwy 1	TWSC	20.9	C	21.7	C
29	Sherman Rd @ Project Dwy 2	TWSC	12.2	B	14.2	B
30	Sherman Rd @ Project Dwy 3	TWSC	20.4	C	21.8	C
31	Trumble Rd @ Project Dwy 4	TWSC	8.6	A	8.7	A
32	Trumble Rd @ Project Dwy 5	TWSC	8.7	A	8.8	A
33	Dawson Rd @ Project Dwy 6	TWSC	9.9	A	11.0	B
34	Dawson Rd @ Project Dwy 7	TWSC	8.9	A	9.2	A

¹ TWSC = two-way stop control; AWSC = all-way stop control

² Level of service (LOS) rankings based on average control delay (sec/veh) per Highway Control Manual.

X = LOS falls below minimum threshold

Recommended Improvements – Opening Day with Cumulative Projects

With the implementation of the recommended improvements (Section 6), all study intersections are expected to operate at or above the minimum acceptable LOS standard (Table 18, see Appendix D for details).

Table 18: Intersection LOS – Opening Day w. Cumulative Projects with Improvements

	Intersection	Traffic Control ¹	AM Peak Hr		PM Peak Hr	
			Delay	LOS ²	Delay	LOS ²
1	Case Rd / Bonnie Dr @ I-215 SB	Signal	53.1	D	<i>no impact</i>	
7	Ethanac Rd @ I-215 SB	Signal	27.2	C	31.5	C
8	Ethanac Rd @ I-215 NB	Signal	19.1	B	41.8	D
9	Ethanac Rd @ Encanto Dr	Signal	15.1	B	11.7	B
10	Ethanac Rd @ Trumble Rd	Signal	16.7	B	<i>no impact</i>	
11	Ethanac Rd @ Sherman Rd	Signal	38.4	D	50.6	D
12	Ethanac Rd @ Dawson Rd	Signal	10.2	B	35.2	D
13	Ethanac Rd @ Antelope Rd	TWSC	<i>no impact</i>		18.0	C
15	SR-74 @ Menifee Rd	Signal	46.5	D	38.5	D
16	SR-74 @ Briggs Rd	Signal	49.4	D	<i>no impact</i>	
25	McCall Blvd @ I-215 SB	Signal	<i>no impact</i>		29.3	C

¹ TWSC = two-way stop control; AWSC = all-way stop control

² Level of service (LOS) rankings based on average control delay (sec/veh) per Highway Control Manual.

VI. RECOMMENDED IMPROVEMENTS

Project Design Features

The proposed project is located along Trumble Road, Sherman Road, and Dawson Road south of Ethanac Road, within an undeveloped site. The proposed project site plan includes the following improvements:

- Construct curb, sidewalk, and driveway improvements on Trumble Road, Sherman Road, and Dawson Road adjacent to project site (see **Appendix I** for details).
- Provide roadway pavement on unpaved roadway sections adjacent to project site.
- Provide roadway pavement on Sherman Road south of project frontage to McLaughlin Road and on McLaughlin Road between Trumble Road and Sherman Road to provide two-lane roadway.
- Signing/striping to be implemented along with detailed construction plans for the project site.
- Sight distance at the project driveways will be reviewed with respect to City of Menifee standards at the time of preparation of final grading, landscape, site development, and street improvement plans.

Traffic Impact Mitigation Measures

Several study intersections are expected to operate below the minimum acceptable LOS standard under existing conditions (existing impact), with the opening of the project (direct impact), or with the completion of nearby cumulative projects and the proposed project (cumulative impact). **Table 19** provides a summary of the recommended improvements at each study intersection with impacts to traffic operations.

It is noted that although the intersection of Case Road/Bonnie Drive @ I-215 SB is expected to be directly impacted by the project, an improvement project is currently under design at this location that would provide the additional lane capacity and operational improvements necessary to mitigate the expected project impact. Therefore, it is not expected that the project would contribute to this ongoing improvement project.

It is further noted that the City of Perris has considered eliminating the intersection of Ethanac Road @ Encanto Drive by constructing a new two-lane east/west roadway that will connect Encanto Drive to Trumble Road. In this case, the new traffic signal recommended at this location would not be installed.

Table 19: Recommended Improvements

Intersection	Deficient Operations	Type of Impact	Scenario Needed	Recommended Improvements
1 Case Rd / Bonnie Dr @ I-215 SB	AM	Cumulative	Opening Day	- provide second SB through lane
7 Ethanac Rd @ I-215 SB	PM	Cumulative	Cumulative	- provide second EB through lane (no widening) - provide second WB left-turn lane (no widening)
8 Ethanac Rd @ I-215 NB	AM/PM	Direct	Opening Day	- restripe/widen Ethanac for 2 thru lanes per direction
			Cumulative	- provide second EB left-turn lane - provide WB right-turn lane
9 Ethanac Rd @ Encanto Dr	AM/PM	Cumulative	Opening Day	- widen Ethanac to provide 2 thru lanes each direction - install new traffic signal
10 Ethanac Rd @ Trumble Rd	AM	Direct	Opening Day	- widen Ethanac to provide 2 thru lanes each direction
11 Ethanac Rd @ Sherman Rd	AM/PM	Direct	Opening Day	- install new traffic signal - provide E/W left-turn lanes - provide SB, EB, WB right-turn lane
				- NB: provide 2 left-turn lanes, shared thru/right lane - provide N/S protected left-turn phasing
			Cumulative	- provide WB shared through/right lane at intersection - provide EB right-turn overlap phasing
12 Ethanac Rd @ Dawson Rd	AM/PM	Direct	Opening Day	- install new traffic signal - provide WB left-turn lane
13 Ethanac Rd @ Antelope Rd	PM	Cumulative	Cumulative	- widen Ethanac Rd to provide two-way left-turn lane through intersection
15 SR-74 @ Menifee Rd	AM/PM	Cumulative	Opening Day	- provide N/S left-turn lanes - modify signal to eliminate N/S split phase operation - modify signal to provide N/S protected left-turn - modify signal to provide NB right-turn overlap phasing
				Cumulative
16 SR-74 @ Briggs Rd	AM	Cumulative	Opening Day	- provide second NB left-turn lane, NB right-turn lane - provide SB right-turn lane - modify signal to eliminate N/S split phase operation - modify signal to provide N/S protected left-turn - modify signal to provide EB right-turn overlap phasing
25 McCall Blvd @ I-215 SB	PM	Cumulative	Cumulative	- provide second SB left-turn lane - provide second SB right-turn lane
Ethanac Rd (I-215 to Sherman Rd)		Direct	Opening Day	- widen from 1 to 2 lanes each direction (approx. 0.7 mi)

Project Fair Share Contribution

Just as the project traffic would comprise a portion of the traffic at impacted intersections, the project would contribute to the cost of improvements proportionately, per City and regional funding programs (Table 20).

Table 20: Project Fair Share Contribution

Intersection	AM Peak Hour			PM Peak Hour			Project Fair Share
	EACP Growth	Project Traffic	Fair Share	EACP Growth	Project Traffic	Fair Share	
1 Case Rd / Bonnie Dr @ I-215 SB	225	34	15.1%	<i>acceptable LOS conditions</i>			15.1%
7 Ethanac Rd @ I-215 SB	<i>acceptable LOS conditions</i>			1,488	647	43.5%	43.5%
8 Ethanac Rd @ I-215 NB	<i>direct project impact</i>						100%
9 Ethanac Rd @ Encanto Dr	1,189	883	74.3%	1,683	1,177	69.9%	74.3%
10 Ethanac Rd @ Trumble Rd	<i>direct project impact</i>						100%
11 Ethanac Rd @ Sherman Rd	<i>direct project impact</i>						100%
12 Ethanac Rd @ Dawson Rd	<i>direct project impact</i>						100%
13 Ethanac Rd @ Antelope Rd	<i>acceptable LOS conditions</i>			614	186	30.3%	30.3%
15 SR-74 @ Menifee Rd	528	89	16.9%	741	125	16.9%	16.9%
16 SR-74 @ Briggs Rd	460	67	14.6%	<i>acceptable LOS conditions</i>			14.6%
25 McCall Blvd @ I-215 SB	<i>acceptable LOS conditions</i>			743	73	9.8%	9.8%

VII. OTHER PROJECT CONSIDERATIONS

Roadway Segment Analysis

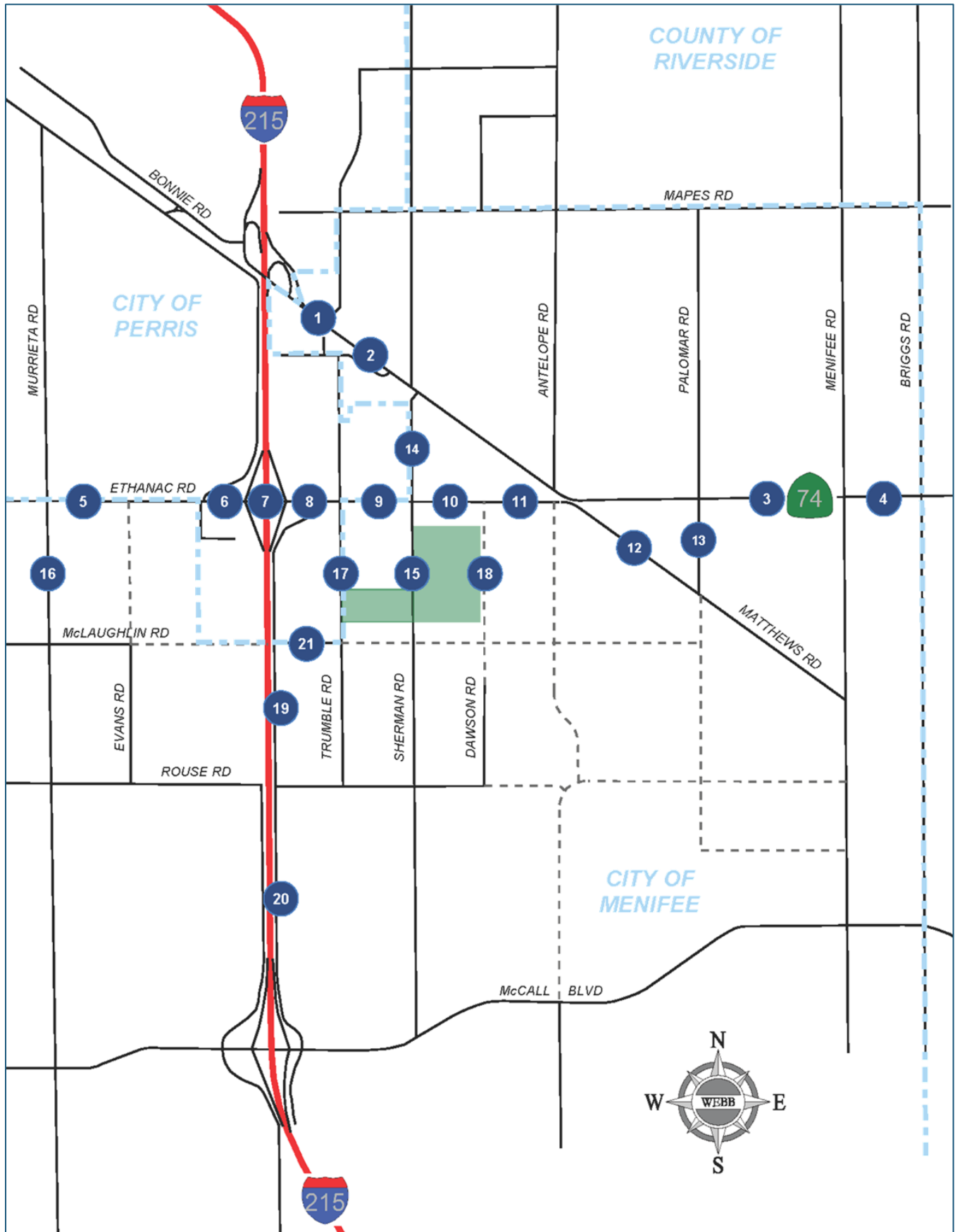
Per the City of Menifee Traffic Study Guidelines, the study analyzed segments along the following roadways adjacent to the project or where the project is expected to contribute at least 500 daily trips (**Figure 20**):

- **SR-74** from the I-215 interchange to Sherman Road
- **SR-74** from Menifee Road to Briggs Road
- **Ethanac Road** from Murrieta Road to Antelope Road
- **Matthews Road** from Antelope Road to Palomar Road
- **Palomar Road** from Matthews Road to SR-74
- **Sherman Road** from SR-74 to McLaughlin Road
- **Trumble Road** and **Dawson Road** south of Ethanac Road along the project frontage
- **Encanto Drive** from McLaughlin Road to McCall Road
- **McLaughlin Road** from Encanto Drive to Sherman Road

Similar to the intersection LOS analysis, the roadway segment analysis assigns an LOS ranking from LOS A to LOS F, indicating relative vehicle density or congestion along the roadway segment. The rankings are based on estimated daily vehicle capacities based on roadway classifications and number of travel lanes as defined in the City of Menifee General Plan and Traffic Study Guidelines. Per the City of Menifee General Plan, the minimum acceptable LOS for roadway segments is LOS D.

The roadway segment analysis is based on daily traffic volume data from 2018, 2019, and 2021 (**Appendix C**). To estimate typical 2021 traffic, a 2% annual ambient growth rate is applied to prior year data while the pandemic adjustment rate of 1.32 is applied to 2021 data.

Figure 20: Roadway Segment Map



Existing Conditions (2021)

Table 20 provides the roadway segment analysis for the existing condition (2021), including adjustment factors. The following study roadway segments currently operate below the minimum acceptable LOS, while all other study roadway segments currently operate under acceptable LOS:

- #1 SR-74 between I-215 NB and Trumble Rd
- #2 SR-74 between Trumble Rd and Sherman Rd
- #4 SR-74 between Menifee Rd and Briggs Rd

Table 21: Roadway Segment LOS – Existing Conditions (2021)

	Roadway Segment	Roadway Classification	# Lanes	Capacity	ADT	V/C	LOS
SR-74							
1	I-215 NB - Trumble Rd	Major	4	34,100	36,913	1.08	F
2	Trumble Rd - Sherman Rd	Major	4	34,100	31,003	0.91	E
3	Palomar Rd - Menifee Rd	Major	4	34,100	28,273	0.83	D
4	Menifee Rd - Briggs Rd	Major	4	34,100	34,086	1.00	E
Ethanac Rd							
5	Murrieta Rd - Case Rd / Barnett Rd	Urban Arterial	4	37,530	15,736	0.42	A
6	Case Rd / Barnett Rd - I-215 SB	Urban Arterial	4	37,530	26,897	0.72	C
7	I-215 SB - I-215 NB	Major	3	25,575	19,515	0.76	C
8	I-215 NB - Trumble Rd	Major	2	17,050	13,517	0.79	C
9	Trumble Rd - Sherman Rd	Major	2	17,050	9,090	0.53	A
10	Sherman Rd - Dawson Rd	Major	2	17,050	8,147	0.48	A
11	Dawson Rd - Antelope Rd	Major	2	17,050	7,206	0.42	A
Matthews Rd							
12	Antelope Rd - Palomar Rd	Collector	2	13,000	7,104	0.55	A
Palomar Rd							
13	Matthews Rd - SR-74	Collector	2	13,000	5,539	0.43	A
Sherman Rd							
14	SR-74 - Ethanac Rd	Major	2	17,050	3,361	0.20	A
15	Ethanac Rd - McLaughlin Rd	Major	2	17,050	513	0.03	A
Trumble Rd							
16	Ethanac Rd - S Project Boundary	Collector	2	13,000	660	0.05	A
Dawson Rd							
17	Ethanac Rd - S Project Boundary	Collector	2	13,000	94	0.01	A
Encanto Dr							
18	McLaughlin Rd - Rouse Rd	Major	2	17,050	3,143	0.18	A
19	Rouse Rd - McCall Blvd	Major	2	17,050	4,784	0.28	A
McLaughlin Rd							
20	Encanto Dr - Sherman Rd	Collector	2	13,000	743	0.06	A

Source: City of Menifee Traffic Impact Analysis Guidelines

X Segment does not meet minimum LOS standard

Opening Day Conditions (2024)

Table 21 provides the roadway segment analysis for the opening day condition (2023), including ambient area growth and anticipated project traffic. The following roadway segments are expected to be impacted:

- #1 SR-74 between I-215 NB and Trumble Rd
- #2 SR-74 between Trumble Rd and Sherman Rd
- #3 SR-74 between Palomar Rd and Menifee Rd
- #4 SR-74 between Menifee Rd and Briggs Rd
- #7 Ethanac Rd between I-215 SB and I-215 NB
- #8 Ethanac Rd between I-215 NB and Trumble Rd
- #9 Ethanac Rd between Trumble Rd and Sherman Rd

Table 22: Roadway Segment LOS – Opening Day Conditions (2024)

	Roadway Segment	Roadway Classification	# Lanes	Capacity	Existing + Ambient			Existing + Ambient with Project				
					ADT	V/C	LOS	Project ADT	Total ADT	V/C	LOS	Impact
SR-74												
1	I-215 NB - Trumble Rd	Major	4	34,100	40,693	1.19	F	248	40,941	1.20	F	YES
2	Trumble Rd - Sherman Rd	Major	4	34,100	34,176	1.00	F	497	34,673	1.02	F	YES
3	Palomar Rd - Menifee Rd	Major	4	34,100	31,170	0.91	E	662	31,832	0.93	E	YES
4	Menifee Rd - Briggs Rd	Major	4	34,100	37,575	1.10	F	497	38,072	1.12	F	YES
Ethanac Rd												
5	Murrieta Rd - Case Rd / Barnett Rd	Urban Arterial	4	37,530	17,349	0.46	A	828	18,177	0.48	A	NO
6	Case Rd / Barnett Rd - I-215 SB	Urban Arterial	4	37,530	29,650	0.79	C	828	30,478	0.81	D	NO
7	I-215 SB - I-215 NB	Major	3	25,575	21,511	0.84	D	4,093	25,604	1.00	F	YES
8	I-215 NB - Trumble Rd	Major	2	17,050	14,900	0.87	D	6,394	21,294	1.25	F	YES
9	Trumble Rd - Sherman Rd	Major	2	17,050	10,022	0.59	A	6,990	17,012	1.00	E	YES
10	Sherman Rd - Dawson Rd	Major	2	17,050	8,981	0.53	A	1,376	10,357	0.61	B	NO
11	Dawson Rd - Antelope Rd	Major	2	17,050	7,943	0.47	A	993	8,936	0.52	A	NO
Matthews Rd												
12	Antelope Rd - Palomar Rd	Collector	2	13,000	7,830	0.60	B	993	8,823	0.68	B	NO
Palomar Rd												
13	Matthews Rd - SR-74	Collector	2	13,000	6,107	0.47	A	745	6,852	0.53	A	NO
Sherman Rd												
14	SR-74 - Ethanac Rd	Major	2	17,050	3,702	0.22	A	662	4,364	0.26	A	NO
15	Ethanac Rd - McLaughlin Rd	Major	2	17,050	566	0.03	A	6,044	6,610	0.39	A	NO
Trumble Rd												
16	Ethanac Rd - S Project Boundary	Collector	2	13,000	920	0.07	A	166	1,086	0.08	A	NO
Dawson Rd												
17	Ethanac Rd - S Project Boundary	Collector	2	13,000	127	0.01	A	2,070	2,197	0.17	A	NO
Encanto Dr												
18	McLaughlin Rd - Rouse Rd	Major	2	17,050	4,398	0.26	A	828	5,226	0.31	A	NO
19	Rouse Rd - McCall Blvd	Major	2	17,050	6,696	0.39	A	828	7,524	0.44	A	NO
McLaughlin Rd												
20	Encanto Dr - Sherman Rd	Collector	2	13,000	1,041	0.08	A	828	1,869	0.14	A	NO

Source: City of Menifee Traffic Impact Analysis Guidelines

X Segment does not meet minimum LOS standard

Opening Day Conditions with Cumulative Projects (2024)

Table 22 provides the roadway segment analysis for the opening day with cumulative projects condition (2023), including ambient area growth, cumulative project traffic, and anticipated project traffic. The following roadway segments are expected to be impacted:

- #1 SR-74 between I-215 NB and Trumble Rd
- #2 SR-74 between Trumble Rd and Sherman Rd
- #3 SR-74 between Palomar Rd and Menifee Rd
- #4 SR-74 between Menifee Rd and Briggs Rd
- #6 Ethanac Rd between Case Rd / Barnett Rd and I-215 SB
- #7 Ethanac Rd between I-215 SB and I-215 NB
- #8 Ethanac Rd between I-215 NB and Trumble Rd
- #9 Ethanac Rd between Trumble Rd and Sherman Rd
- #12 Matthews Rd between Antelope Rd and Palomar Rd

Table 23: Roadway Segment LOS – Opening Day with Cumulative Projects

	Roadway Segment	Roadway Classification	# Lanes	Capacity	Ex + Ambient + Cumulative			Ex + Ambient + Cumulative with Project				
					ADT	V/C	LOS	Project ADT	Total ADT	V/C	LOS	Impact
SR-74												
1	I-215 NB - Trumble Rd	Major	4	34,100	43,072	1.26	F	248	43,320	1.27	F	YES
2	Trumble Rd - Sherman Rd	Major	4	34,100	36,555	1.07	F	497	37,052	1.09	F	YES
3	Palomar Rd - Menifee Rd	Major	4	34,100	33,549	0.98	E	662	34,211	1.00	F	YES
4	Menifee Rd - Briggs Rd	Major	4	34,100	39,954	1.17	F	497	40,451	1.19	F	YES
Ethanac Rd												
5	Murrieta Rd - Case Rd / Barnett Rd	Urban Arterial	4	37,530	21,214	0.57	A	828	22,042	0.59	A	NO
6	Case Rd / Barnett Rd - I-215 SB	Urban Arterial	4	37,530	33,515	0.89	D	828	34,343	0.92	E	YES
7	I-215 SB - I-215 NB	Major	3	25,575	25,376	0.99	E	4,093	29,469	1.15	F	YES
8	I-215 NB - Trumble Rd	Major	2	17,050	18,765	1.10	F	6,394	25,159	1.48	F	YES
9	Trumble Rd - Sherman Rd	Major	2	17,050	13,887	0.81	D	6,990	20,877	1.22	F	YES
10	Sherman Rd - Dawson Rd	Major	2	17,050	12,846	0.75	C	1,376	14,222	0.83	D	NO
11	Dawson Rd - Antelope Rd	Major	2	17,050	11,808	0.69	B	993	12,801	0.75	C	NO
Matthews Rd												
12	Antelope Rd - Palomar Rd	Collector	2	13,000	11,695	0.90	D	993	12,688	0.98	E	YES
Palomar Rd												
13	Matthews Rd - SR-74	Collector	2	13,000	6,107	0.47	A	745	6,852	0.53	A	NO
Sherman Rd												
14	SR-74 - Ethanac Rd	Major	2	17,050	3,833	0.22	A	662	4,495	0.26	A	NO
15	Ethanac Rd - McLaughlin Rd	Major	2	17,050	1,540	0.09	A	6,044	7,584	0.44	A	NO
Trumble Rd												
16	Ethanac Rd - S Project Boundary	Collector	2	13,000	920	0.07	A	166	1,086	0.08	A	NO
Dawson Rd												
17	Ethanac Rd - S Project Boundary	Collector	2	13,000	127	0.01	A	2,070	2,197	0.17	A	NO
Encanto Dr												
18	McLaughlin Rd - Rouse Rd	Major	2	17,050	4,398	0.26	A	828	5,226	0.31	A	NO
19	Rouse Rd - McCall Blvd	Major	2	17,050	6,696	0.39	A	828	7,524	0.44	A	NO
McLaughlin Rd												
20	Encanto Dr - Sherman Rd	Collector	2	13,000	1,041	0.08	A	828	1,869	0.14	A	NO

Source: City of Menifee Traffic Impact Analysis Guidelines

X Segment does not meet minimum LOS standard

Recommended Improvements

The proposed project is expected to create or contribute to traffic impacts along SR-74, Ethanac Road, and Matthews Road. SR-74 is currently built out to its ultimate designated width from the I-215 interchange to Sherman Road; therefore, no further roadway capacity improvements can be constructed there. It is recommended that Ethanac Road be widened to provide four through lanes from the I-215 interchange to Sherman Road. Likewise, it is recommended that Matthews Road be widened to provide four through lanes east of Antelope Road. For those roadway segments with cumulative impacts, the project fair share contributions are given in **Table 24**.

Table 24: Roadway Segment Fair Share Contributions

Roadway Segment	Type of Impact	TUMF ¹	ADT				Fair Share %	
			Existing (2021)	EACP (2023)	Total Growth	Project Only		
SR-74²								
1	I-215 NB - Trumble Rd	Cumulative	-	36,913	42,552	5639	248	4.4%
2	Trumble Rd - Sherman Rd	Cumulative	-	31,003	36,407	5404	497	9.2%
3	Palomar Rd - Menifee Rd	Direct	-	28,273	33,620	5347	662	100%
4	Menifee Rd - Briggs Rd	Cumulative	Yes	34,086	39,745	5659	497	TUMF
Ethanac Rd								
6	Case Rd / Barnett Rd - I-215 SB	Cumulative	-	26,897	33,784	6887	828	12.0%
7	I-215 SB - I-215 NB	Direct	-	19,515	29,062	9547	4,093	100%
8	I-215 NB - Trumble Rd	Direct	-	13,517	24,877	11360	6,394	100%
9	Trumble Rd - Sherman Rd	Direct	-	9,090	20,691	11601	6,990	100%
Matthews Rd								
12	Antelope Rd - Palomar Rd	Cumulative	-	7,104	12,540	5436	993	18.3%

¹ Transportation Uniform Mitigation Fee program

² SR-74 is currently built out to its ultimate width from the I-215 interchange to Sherman Rd; no further capacity improvements can be

Freeway Analysis

Per the California Department of Transportation District 8, a freeway ramp merge and diverge analysis has been conducted for the two freeway interchanges within the study area: I-215 at SR-74 and at Ethanac Road. The analysis uses Highway Capacity Software version 7 (HCS7) and methodology from the latest *Highway Capacity Manual* from the Transportation Research Board to assign LOS rankings based on a calculated vehicle density in passenger cars per lane-mile (pc/mi/ln) within the ramp influence area where cars are merging onto or diverging off of the freeway. **Table 25** shows the LOS ranking thresholds while **Tables 26-28** provide the analysis results for the existing, opening day, and opening day with cumulative projects scenarios, respectively. Detailed worksheets are provided in **Appendix F**.

Table 25: Level of Service for Freeway Segments

Density (pc/mi/ln)	Level of Service
0 - 10	A
10 - 20	B
20 - 28	C
28 - 35	D
35 +	E
exceeds capacity	F

Source: Transportation Research Board,
Highway Capacity Manual 6 (2016)

Table 26: Freeway Analysis – Existing Conditions

Location	Analysis Type	No. Lanes		AM Peak Hour				PM Peak Hour				
		Main	Ramp	Main Volume	Ramp Volume	Density (pc/mi/ln)	LOS	Main Volume	Ramp Volume	Density (pc/mi/ln)	LOS	
I-215 Southbound												
1	SR-74 off-ramp	Diverge	3	1	4,026	703	18.4	B	4,408	962	20.4	C
2	SR-74 on-ramp	Merge	3	1	3,336	470	23.5	C	3,465	375	23.2	C
3	Ethanac Rd off-ramp	Diverge	3	1	3,797	322	18.8	B	3,833	419	18.7	B
4	Ethanac Rd on-ramp	Merge	3	1	3,488	546	22.1	C	3,430	514	21.3	C
I-215 Northbound												
1	Ethanac Rd off-ramp	Diverge	3	1	3,985	424	20.7	C	5,185	611	27.9	C
2	Ethanac Rd on-ramp	Merge	3	1	3,577	280	20.2	C	4,597	400	27.6	C
3	SR-74 off-ramp	Diverge	3	1	3,847	582	24.6	C	4,982	316	31	D
4	SR-74 on-ramp	Merge	3	1	3,276	533	17.3	B	4,672	831	28.4	D

Table 27: Freeway Analysis – Opening Day Conditions

Location	Analysis Type	No. Lanes		AM Peak Hour				PM Peak Hour				
		Main	Ramp	Main Volume	Ramp Volume	Density (pc/mi/ln)	LOS	Main Volume	Ramp Volume	Density (pc/mi/ln)	LOS	
I-215 Southbound												
1	SR-74 off-ramp	Diverge	3	1	4,026	703	21.3	C	4,408	962	22.7	C
2	SR-74 on-ramp	Merge	3	1	3,336	470	27	C	3,465	375	26	C
3	Ethanac Rd off-ramp	Diverge	3	1	3,797	322	22.2	C	3,833	419	21.4	C
4	Ethanac Rd on-ramp	Merge	3	1	3,488	546	23.9	C	3,430	514	24.6	C
I-215 Northbound												
1	Ethanac Rd off-ramp	Diverge	3	1	3,985	424	23.5	C	5,185	611	30.3	D
2	Ethanac Rd on-ramp	Merge	3	1	3,577	280	22.3	C	4,597	400	32.1	D
3	SR-74 off-ramp	Diverge	3	1	3,847	582	26.3	C	4,982	316	33.9	D
4	SR-74 on-ramp	Merge	3	1	3,276	533	19.1	B	4,672	831	32.2	D

Table 28: Freeway Analysis – Opening Day Conditions with Cumulative Projects

Location	Analysis Type	No. Lanes		AM Peak Hour				PM Peak Hour				
		Main	Ramp	Main Volume	Ramp Volume	Density (pc/mi/ln)	LOS	Main Volume	Ramp Volume	Density (pc/mi/ln)	LOS	
I-215 Southbound												
1	SR-74 off-ramp	Diverge	3	1	4,026	703	21.8	C	4,408	962	23.5	C
2	SR-74 on-ramp	Merge	3	1	3,336	470	27.9	C	3,465	375	27.5	C
3	Ethanac Rd off-ramp	Diverge	3	1	3,797	322	23.1	C	3,833	419	22.7	C
4	Ethanac Rd on-ramp	Merge	3	1	3,488	546	25	C	3,430	514	26	C
I-215 Northbound												
1	Ethanac Rd off-ramp	Diverge	3	1	3,985	424	24.3	C	5,185	611	31.4	D
2	Ethanac Rd on-ramp	Merge	3	1	3,577	280	23.3	C	4,597	400	33.6	D
3	SR-74 off-ramp	Diverge	3	1	3,847	582	27	C	4,982	316	34.7	D
4	SR-74 on-ramp	Merge	3	1	3,276	533	19.8	B	4,672	831	33.2	D

Traffic Signal Warrants

The California Manual on Uniform Control Devices (MUTCD) provides a set of nine warrant guidelines for the installation of a traffic signal. These traffic signal warrants include volume thresholds as well as other considerations such as proximity to railroad grade crossings or existing traffic signals.

Accordingly, as a preliminary step in assessing the need for and feasibility of a new traffic signal, this study analyzes whether unsignalized study intersections meet the peak-hour traffic signal warrant as outlined in the MUTCD in any study scenario (Table 29, see Appendix G for worksheets).

Per the MUTCD guidelines, the satisfaction of any single warrant shall not require the installation of a traffic signal. The peak-hour traffic signal warrant analysis should only be considered an indicator that an unsignalized intersection is likely to meet one or more of the other volume-based signal warrants. The MUTCD further advises that an engineering study should be conducted to determine that installing a traffic control signal will improve the overall safety and/or operation of the intersection and not seriously disrupt progressive traffic flow. A full assessment of the traffic signal warrants—including traffic volumes, collision history, and other factors—may be conducted prior to installing a new traffic signal to assess traffic conditions and safety concerns at the intersection.

Table 29: Peak-Hour Traffic Signal Warrants

	Intersection	Existing (2021)		Opening Day		OD w Cumulative	
		AM	PM	AM	PM	AM	PM
9	Ethanac Rd @ Encanto Dr	YES	YES	YES	YES	YES	YES
11	Ethanac Rd @ Sherman Rd	NO	NO	YES	YES	YES	YES
12	Ethanac Rd @ Dawson Rd	NO	NO	NO	YES	NO	YES
13	Ethanac Rd @ Antelope Rd	NO	NO	NO	NO	NO	NO
17	Matthews Rd @ Palomar Rd	YES	NO	YES	NO	YES	YES
18	McLaughlin Rd @ Murrieta Rd	NO	NO	NO	NO	NO	NO
19	McLaughlin Rd @ Encanto Dr	NO	NO	NO	NO	NO	NO
20	McLaughlin Rd @ Trumble Rd	NO	NO	NO	NO	NO	NO
21	McLaughlin Rd @ Sherman Rd	NO	NO	NO	NO	NO	NO
22	Rouse Rd @ Murrieta Rd	NO	NO	NO	NO	NO	NO
23	Rouse Rd @ Encanto Dr	NO	NO	NO	NO	NO	NO
28	Sherman Rd @ Project Dwy 1	<i>DOES NOT EXIST</i>		NO	NO	NO	NO
29	Sherman Rd @ Project Dwy 2	<i>DOES NOT EXIST</i>		NO	NO	NO	NO
30	Sherman Rd @ Project Dwy 3	<i>DOES NOT EXIST</i>		NO	NO	NO	NO
31	Trumble Rd @ Project Dwy 4	<i>DOES NOT EXIST</i>		NO	NO	NO	NO
32	Trumble Rd @ Project Dwy 5	<i>DOES NOT EXIST</i>		NO	NO	NO	NO
33	Dawson Rd @ Project Dwy 6	<i>DOES NOT EXIST</i>		NO	NO	NO	NO
34	Dawson Rd @ Project Dwy 7	<i>DOES NOT EXIST</i>		NO	NO	NO	NO

YES = meets the peak-hour volume warrant per MUTCD



Corporate Headquarters

3788 McCray Street
Riverside, CA 92506
T: 951.686.1070

Palm Desert Office

74967 Sheryl Avenue
Palm Desert, CA 92211
T: 951.686.1070

Murrieta Office

41870 Kalmia Street #160
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Appendix A

Scoping Agreement

SCOPING AGREEMENT FOR TRAFFIC IMPACT STUDY

This letter acknowledges the City of Menifee requirements for traffic impact analysis of the following project.

Case No. _____

Related Cases

**REVISED MAY 10, 2021 TO INCLUDE
ADDITIONAL 100 KSF MEZZANINE**

SP No. Menifee North (260)

EIR No. _____

GPA No. _____

CZ No. _____

Project Name Menifee Commerce Center

Project Address North of McLaughlin Road between Trumble Road and Dawson Road

Project Description 1,154,160 sf fulfillment center warehouse with 100,000 sf mezzanine and 385,970 sf warehouse

Consultant

Developer

Name Albert A. Webb Associates

Core 5

Address 3788 McCray St
Riverside, CA 92506

300 Spectrum Center Dr #880
Irvine, CA 92618

Telephone 951-686-1070

949-702-4548

A. Trip Generation Source: ITE 10th Edition

Current Land Use Vacant

Proposed Land Use Menifee North SP

Current Zoning Menifee North SP

Proposed Zoning Menifee North SP

Project Trip Generation (raw trips)

Project Trip Generation (PCE)

Passenger Car	Project Trip Generation (raw trips)			Project Trip Generation (PCE)		
	<i>In</i>	<i>Out</i>	<i>Total</i>	<i>In</i>	<i>Out</i>	<i>Total</i>
AM Trips	865	205	1,070	890	228	1,118
PM Trips	561	898	1,459	588	926	1,514

Internal Trip Allowance Yes No (0%)

Pass-By Trip Allowance Yes No (0%)

B. Trip Geographic Distribution

	N		S		E		W
Passenger Cars	43 %		35 %		12 %		10 %
Trucks	60 %		40 %		0 %		0 %

C. Background Traffic

Project Opening Year: 2023

Ambient Annual Growth Rate: 2 %

Phase Year(s): N/A

Other area projects to be analyzed: See attached table

Model/Forecast methodology: Build-Up Method

D. Study Roadway Segments:

SR-74

- 1 I-215 NB Ramps to Trumble Rd
- 2 Trumble Rd to Sherman Rd
- 3 Palomar Rd to Menifee Rd
- 4 Menifee Rd to Briggs Rd

Ethanac Rd

- 5 Murrieta Rd to Case Rd / Barnett Rd
- 6 Case Rd / Barnett Rd to I-215 SB Ramps
- 7 I-215 SB Ramps to I-215 NB Ramps
- 8 I-215 NB Ramps to Trumble Rd

- 9 Trumble Rd to Sherman Rd

- 10 Sherman Rd to Dawson Rd

- 11 Dawson Rd to Antelope Rd

Matthews Rd

- 12 Antelope Rd to Palomar Rd

Palomar Rd

- 13 Matthews Rd to SR-74

Sherman Rd

- 14 SR-74 to Ethanac Rd

- 15 Ethanac Rd to South Project Boundary

- 16 South Project Boundary to McLaughlin Road

Murrieta Rd

- 17 Ethanac Rd to McLaughlin Rd

McCall Blvd

- 18 I-215 SB Ramps to I-215 NB Ramps

- 19 I-215 NB Ramps to Encanto Dr

- 20 **Trumble Rd** – Ethanac Rd to South Project Boundary

- 21 **Dawson Rd** – Ethanac Rd to South Project Boundary

Encanto Dr

- 22 McLaughlin Rd to Rouse Rd

- 23 Rouse Rd to McCall Blvd

McLaughlin Rd

- 24 Encanto Dr to Sherman Rd

E. Study Intersections:

- 1 Case Rd / Bonnie Dr @ I-215 SB Ramps

- 2 SR-74 @ I-215 NB Ramps

- 3 SR-74 @ Trumble Rd

- 4 SR-74 @ Sherman Rd

- 5 Ethanac Rd @ Murrieta Rd

- 6 Ethanac Rd @ Case Rd / Barnett Rd

- 7 Ethanac Rd @ I-215 SB Ramps

- 8 Ethanac Rd @ I-215 NB Ramps

- 9 Ethanac Rd @ Encanto Dr

- 10 Ethanac Rd @ Trumble Rd

- 11 Ethanac Rd @ Sherman Rd

- 12 Ethanac Rd @ Dawson Rd

- 13 Ethanac Rd @ Antelope Rd

- 14 SR-74 @ Palomar Rd

- 15 SR-74 @ Menifee Rd

- 16 SR-74 @ Briggs Rd

- 17 Matthews Rd @ Palomar Rd

- 18 McLaughlin Rd @ Murrieta Rd

- 19 McLaughlin Rd @ Encanto Dr

- 20 McLaughlin Rd @ Trumble Rd

- 21 McLaughlin Rd @ Sherman Rd

- 22 Rouse Rd @ Murrieta Rd

- 23 Rouse Rd @ Encanto Dr

- 24 McCall Blvd @ Bradley Rd

- 25 McCall Blvd @ I-215 SB Ramps

- 26 McCall Blvd @ I-215 NB Ramps

- 27 McCall Blvd @ Encanto Dr

- 28 Sherman Rd @ Project Dwy 1

- 29 Sherman Rd @ Project Dwy 2

- 30 Sherman Rd @ Project Dwy 3

- 31 Trumble Rd @ Project Dwy 4 (PC only)

- 32 Trumble Rd @ Project Dwy 5 (PC only)

- 33 Dawson Rd @ Project Dwy 6

- 34 Dawson Rd @ Project Dwy 7 (PC only)

F. Other Jurisdictional Impacts:

Is project within another agency's sphere of influence or one mile of city boundaries? Yes No

If so, name of City / Jurisdiction: City of Perris, County of Riverside, Caltrans

G. Site Plan (see attached figure)

H. Specific issues to be addressed (in addition to standard analysis described in the Guidelines)

- 1) VMT analysis to be conducted based on RivTAM & City guidelines, when established
- 2) New traffic counts will be compared to Spring 2019 counts at the same intersection(s), where available. A correction factor will be applied to new counts as needed.
- 3) Freeway merge/diverge analysis to be included per Caltrans request

I. Existing Conditions Traffic Data:

Traffic Count Data: New Recent If recent, provide counts date: January 22, 2019

J. Analysis Scenarios

- 1 Existing Conditions
- 2 Opening Year Conditions (Existing + Ambient Growth) + Project
- 3 Opening Year Conditions (Existing + Ambient Growth) + Project with Mitigation (if applicable)
- 4 Opening Year Conditions with Cumulative Projects
- 5 Opening Year Conditions with Cumulative Projects + Project
- 6 Opening Year Conditions with Cumulative Projects + Project with Mitigation (if applicable)

Buildout year conditions not analyzed as warehousing/distribution is an allowable land use in the existing Specific Plan (PA 2) as well as in the existing General Plan (BP). There is no expected impact to long-range traffic planning forecasts.

J. Peak Hour Factor (PHF)

For Existing Conditions: Existing PHF

For Opening Year Conditions: 0.95 if large number of cumulative projects; otherwise, existing PHF

K. Project Description

The proposed fulfillment center warehouse is expected to be a sort center that processes and delivers smaller packages. These facilities generally have higher numbers of employees and passenger car trips than other warehouse land uses. The economic report estimates 619 direct employees, but that may vary depending on the season and shift. The proposed warehouse land use is expected to have standard warehouse operations with relatively low number of employees and higher percentage of truck trips.

L. Truck Splits

Truck splits for the warehouses were calculated using the ITE Trip Generation Manual (Land uses 150 and 155) and the High-Cube Warehouse Vehicle Trip Generation Analysis by SCAQMD and ITE. The passenger car rates were the total vehicle rates less the truck generation rate in the ITE Trip Generation Manual. SCAQMD truck splits were applied to the truck generation rate to determine the truck splits by axle.

Recommended by:



Nicholas Lowe, PE
Consultant Engineer

1/6/2021

Date

Revised: 5/10/21

Date

Approved by:

City of Meniffee

Date

Table 1: Trip Generation Rates
High-Cube Fulfillment Center Warehouse (sort)

Vehicle Type	PCE Factor ¹	Estimated Mix ²	Units ³	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Trip Generation Rates (classification, non-PCE)⁴										
<i>Passenger Cars</i> ⁵	-	-	KSF	6.25	0.695	0.155	0.850	0.459	0.721	1.18
<i>2-axle Trucks</i>	-	16.7%		0.032	0.002	0.002	0.003	0.002	0.002	0.0033
<i>3-axle Trucks</i>	-	20.7%		0.039	0.002	0.002	0.004	0.002	0.002	0.004
<i>4-axle Trucks</i>	-	62.5%		0.119	0.006	0.006	0.013	0.006	0.007	0.013
Total		100%		6.44	0.705	0.165	0.87	0.468	0.732	1.2
Calculated Trip Generation Rates (PCE)										
<i>Passenger Cars</i> ⁵	1	-	KSF	6.25	0.695	0.155	0.85	0.459	0.721	1.18
<i>2-axle Trucks</i>	1.5	16.7%		0.05	0.003	0.003	0.006	0.002	0.003	0.005
<i>3-axle Trucks</i>	2	20.7%		0.08	0.004	0.004	0.008	0.004	0.004	0.008
<i>4-axle Trucks</i>	3	62.5%		0.36	0.019	0.019	0.038	0.017	0.020	0.037
Total		100%		6.74	0.721	0.181	0.902	0.482	0.748	1.23

¹ PCE factors per San Bernardino County Transportation Authority

² Truck mix per High-Cube Warehouse Vehicle Trip Generation Analysis, ITE (2017); Warehouse Truck Trip Study, SCAQMD (2014)

³ KSF = 1,000 square feet gross floor area

⁴ ITE Trip Generation Manual 10th Ed + Supplement, 2017 - Land Use 155, High-Cube Fulfillment Center Warehouse (sort facility)

⁵ Passenger car rates per ITE vehicle trip generation rates less ITE truck trip generation rates.

Table 2: Trip Generation Rates
Warehousing

Vehicle Type	PCE Factor ¹	Estimated Mix ²	Units ³	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Trip Generation Rates (classification, non-PCE)⁴										
<i>Passenger Cars</i> ⁵	-	-	KSF	1.140	0.121	0.030	0.150	0.036	0.124	0.16
<i>2-axle Trucks</i>	-	16.7%		0.100	0.002	0.002	0.003	0.003	0.002	0.005
<i>3-axle Trucks</i>	-	20.7%		0.124	0.002	0.002	0.004	0.003	0.003	0.006
<i>4-axle Trucks</i>	-	62.5%		0.375	0.007	0.006	0.013	0.010	0.009	0.019
Total		100%		1.74	0.131	0.039	0.17	0.051	0.139	0.19
Calculated Trip Generation Rates (PCE)										
<i>Passenger Cars</i> ⁵	1	-	KSF	1.14	0.121	0.030	0.151	0.036	0.124	0.16
<i>2-axle Trucks</i>	1.5	16.7%		0.15	0.003	0.002	0.005	0.004	0.004	0.008
<i>3-axle Trucks</i>	2	20.7%		0.25	0.004	0.004	0.008	0.006	0.006	0.012
<i>4-axle Trucks</i>	3	62.5%		1.13	0.020	0.018	0.038	0.029	0.027	0.056
Total		100%		2.67	0.148	0.054	0.202	0.075	0.161	0.236

¹ PCE factors per San Bernardino County Transportation Authority

² Truck mix per High-Cube Warehouse Vehicle Trip Generation Analysis, ITE (2017); Warehouse Truck Trip Study, SCAQMD (2014)

³ KSF = 1,000 square feet gross floor area

⁴ ITE Trip Generation Manual 10th Ed + Supplement, 2017 - Land Use 150, Warehousing

⁵ Passenger car rates per ITE vehicle trip generation rates less ITE truck trip generation rates.

Table 3: Project Trip Generation

Core 5 Fulfillment Center (Building 1)

Vehicle Type	PCE Factor ¹	Units ²	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Proposed Project Trip Generation (classification, non-PCE)									
Passenger Cars ⁵	-	1,254 KSF	7,839	871	195	1,066	575	905	1,480
2-axle Trucks	-		40	2	2	4	2	2	4
3-axle Trucks	-		49	3	3	6	2	3	5
4-axle Trucks	-		149	8	8	16	7	8	15
Total				8,077	884	208	1,092	586	918
Passenger Car Equivalent (PCE) Project Trip Generation									
Passenger Cars ⁵	1	1,254 KSF	7,839	871	195	1,066	575	905	1,480
2-axle Trucks	1.5		60	3	3	6	3	3	6
3-axle Trucks	2		98	6	6	12	4	6	10
4-axle Trucks	3		447	24	24	48	21	24	45
Total				8,444	904	228	1,132	603	938

¹ PCE factors per San Bernardino County Transportation Authority

² KSF = 1,000 square feet gross floor area

Table 4: Project Trip Generation

Core 5 Warehouse (Building 2)

Vehicle Type	PCE Factor ¹	Units ²	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Proposed Project Trip Generation (classification, non-PCE)									
Passenger Cars ⁵	-	386 KSF	440	47	11	58	14	48	62
2-axle Trucks	-		39	1	1	2	1	1	2
3-axle Trucks	-		48	1	1	2	1	1	2
4-axle Trucks	-		145	3	2	5	4	3	7
Total				672	52	15	67	20	53
Passenger Car Equivalent (PCE) Project Trip Generation									
Passenger Cars ⁵	1	386 KSF	440	47	11	58	14	48	62
2-axle Trucks	1.5		59	2	2	4	2	2	4
3-axle Trucks	2		96	2	2	4	2	2	4
4-axle Trucks	3		435	9	6	15	12	9	21
Total				1,030	60	21	81	30	61

¹ PCE factors per San Bernardino County Transportation Authority

² KSF = 1,000 square feet gross floor area

Table 5: Project Trip Generation

Core 5 Warehouse Project - Total

Vehicle Type	PCE Factor ¹	Units ²	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Proposed Project Trip Generation (classification, non-PCE)									
<i>Passenger Cars</i> ⁵	-	1,640 KSF	8,279	918	206	1,124	589	953	1,542
<i>2-axle Trucks</i>	-		79	3	3	6	3	3	6
<i>3-axle Trucks</i>	-		97	4	4	8	3	4	7
<i>4-axle Trucks</i>	-		294	11	10	21	11	11	22
Total				8,749	936	223	1,159	606	971
Passenger Car Equivalent (PCE) Project Trip Generation									
<i>Passenger Cars</i> ⁵	1	1,640 KSF	8,279	918	206	1,124	589	953	1,542
<i>2-axle Trucks</i>	1.5		119	5	5	10	5	5	10
<i>3-axle Trucks</i>	2		194	8	8	16	6	8	14
<i>4-axle Trucks</i>	3		882	33	30	63	33	33	66
Total				9,474	964	249	1,213	633	999

¹ PCE factors per San Bernardino County Transportation Authority

² KSF = 1,000 square feet gross floor area

D. Study Roadway Segments:

SR-74

- 1 I-215 NB Ramps to Trumble Rd
- 2 Trumble Rd to Sherman Rd
- 3 Palomar Rd to Menifee Rd
- 4 Menifee Rd to Briggs Rd

Ethanac Rd

- 5 Murrieta Rd to Case Rd / Barnett Rd
- 6 Case Rd / Barnett Rd to I-215 SB Ramps
- 7 I-215 SB Ramps to I-215 NB Ramps
- 8 I-215 NB Ramps to Trumble Rd

- 9 Trumble Rd to Sherman Rd

- 10 Sherman Rd to Dawson Rd

- 11 Dawson Rd to Antelope Rd

Matthews Rd

- 12 Antelope Rd to Palomar Rd

Palomar Rd

- 13 Matthews Rd to SR-74

Sherman Rd

- 14 SR-74 to Ethanac Rd

- 15 Ethanac Rd to South Project Boundary

- 16 South Project Boundary to McLaughlin Road

Murrieta Rd

- 17 Ethanac Rd to McLaughlin Rd

McCall Blvd

- 18 I-215 SB Ramps to I-215 NB Ramps

- 19 I-215 NB Ramps to Encanto Dr

- 20 **Trumble Rd** – Ethanac Rd to South Project Boundary

- 21 **Dawson Rd** – Ethanac Rd to South Project Boundary

Encanto Dr

- 22 McLaughlin Rd to Rouse Rd

- 23 Rouse Rd to McCall Blvd

McLaughlin Rd

- 24 Encanto Dr to Sherman Rd

E. Study Intersections:

- 1 Case Rd / Bonnie Dr @ I-215 SB Ramps

- 2 SR-74 @ I-215 NB Ramps

- 3 SR-74 @ Trumble Rd

- 4 SR-74 @ Sherman Rd (North)

- 5 SR-74 @ Sherman Road (South)

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F. Other Jurisdictional Impacts:

Is project within another agency's sphere of influence or one mile of city boundaries? Yes No

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- 3) Freeway merge/diverge analysis to be included per Caltrans request

I. Existing Conditions Traffic Data:

Traffic Count Data: New Recent If recent, provide counts date: January 22, 2019

J. Analysis Scenarios

- 1 Existing Conditions
- 2 Opening Year Conditions (Existing + Ambient Growth) + Project
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Recommended by:



Nicholas Lowe, PE
Consultant Engineer

1/6/2021

Date

Revised: 1/14/2021

Date

Approved by:



City of Menifee

1/17/21

Date

Table 1: Trip Generation Rates
High-Cube Fulfillment Center Warehouse (sort)

Vehicle Type	PCE Factor ¹	Estimated Mix ²	Units ³	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Trip Generation Rates (classification, non-PCE)⁴										
<i>Passenger Cars</i> ⁵	-	-	KSF	6.25	0.695	0.155	0.850	0.459	0.721	1.18
<i>2-axle Trucks</i>	-	16.7%		0.032	0.002	0.002	0.003	0.002	0.002	0.0033
<i>3-axle Trucks</i>	-	20.7%		0.039	0.002	0.002	0.004	0.002	0.002	0.004
<i>4-axle Trucks</i>	-	62.5%		0.119	0.006	0.006	0.013	0.006	0.007	0.013
Total		100%		6.44	0.705	0.165	0.87	0.468	0.732	1.2
Calculated Trip Generation Rates (PCE)										
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<i>4-axle Trucks</i>	3	62.5%		0.36	0.019	0.019	0.038	0.017	0.020	0.037
Total		100%		6.74	0.721	0.181	0.902	0.482	0.748	1.23

¹ PCE factors per San Bernardino County Transportation Authority

² Truck mix per High-Cube Warehouse Vehicle Trip Generation Analysis, ITE (2017); Warehouse Truck Trip Study, SCAQMD (2014)

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Table 2: Trip Generation Rates
Warehousing

Vehicle Type	PCE Factor ¹	Estimated Mix ²	Units ³	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Trip Generation Rates (classification, non-PCE)⁴										
<i>Passenger Cars</i> ⁵	-	-	KSF	1.140	0.121	0.030	0.150	0.036	0.124	0.16
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<i>3-axle Trucks</i>	-	20.7%		0.124	0.002	0.002	0.004	0.003	0.003	0.006
<i>4-axle Trucks</i>	-	62.5%		0.375	0.007	0.006	0.013	0.010	0.009	0.019
Total		100%		1.74	0.131	0.039	0.17	0.051	0.139	0.19
Calculated Trip Generation Rates (PCE)										
<i>Passenger Cars</i> ⁵	1	-	KSF	1.14	0.121	0.030	0.151	0.036	0.124	0.16
<i>2-axle Trucks</i>	1.5	16.7%		0.15	0.003	0.002	0.005	0.004	0.004	0.008
<i>3-axle Trucks</i>	2	20.7%		0.25	0.004	0.004	0.008	0.006	0.006	0.012
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Total		100%		2.67	0.148	0.054	0.202	0.075	0.161	0.236

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⁵ Passenger car rates per ITE vehicle trip generation rates less ITE truck trip generation rates.

Table 3: Project Trip Generation

Core 5 Fulfillment Center (Building 1)

Vehicle Type	PCE Factor ¹	Units ²	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Proposed Project Trip Generation (classification, non-PCE)									
Passenger Cars ⁵	-	1,154 KSF	7,214	802	179	981	530	832	1,362
2-axle Trucks	-		37	2	2	4	2	2	4
3-axle Trucks	-		45	2	2	4	2	3	5
4-axle Trucks	-		137	7	7	14	7	8	15
Total				7,433	813	190	1,003	541	845
Passenger Car Equivalent (PCE) Project Trip Generation									
Passenger Cars ⁵	1	1,154 KSF	7,214	802	179	981	530	832	1,362
2-axle Trucks	1.5		56	3	3	6	3	3	6
3-axle Trucks	2		90	4	4	8	4	6	10
4-axle Trucks	3		411	21	21	42	21	24	45
Total				7,771	830	207	1,037	558	865

¹ PCE factors per San Bernardino County Transportation Authority

² KSF = 1,000 square feet gross floor area

Table 4: Project Trip Generation

Core 5 Warehouse (Building 2)

Vehicle Type	PCE Factor ¹	Units ²	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Proposed Project Trip Generation (classification, non-PCE)									
Passenger Cars ⁵	-	386 KSF	440	47	11	58	14	48	62
2-axle Trucks	-		39	1	1	2	1	1	2
3-axle Trucks	-		48	1	1	2	1	1	2
4-axle Trucks	-		145	3	2	5	4	3	7
Total				672	52	15	67	20	53
Passenger Car Equivalent (PCE) Project Trip Generation									
Passenger Cars ⁵	1	386 KSF	440	47	11	58	14	48	62
2-axle Trucks	1.5		59	2	2	4	2	2	4
3-axle Trucks	2		96	2	2	4	2	2	4
4-axle Trucks	3		435	9	6	15	12	9	21
Total				1,030	60	21	81	30	61

¹ PCE factors per San Bernardino County Transportation Authority

² KSF = 1,000 square feet gross floor area

Table 5: Project Trip Generation

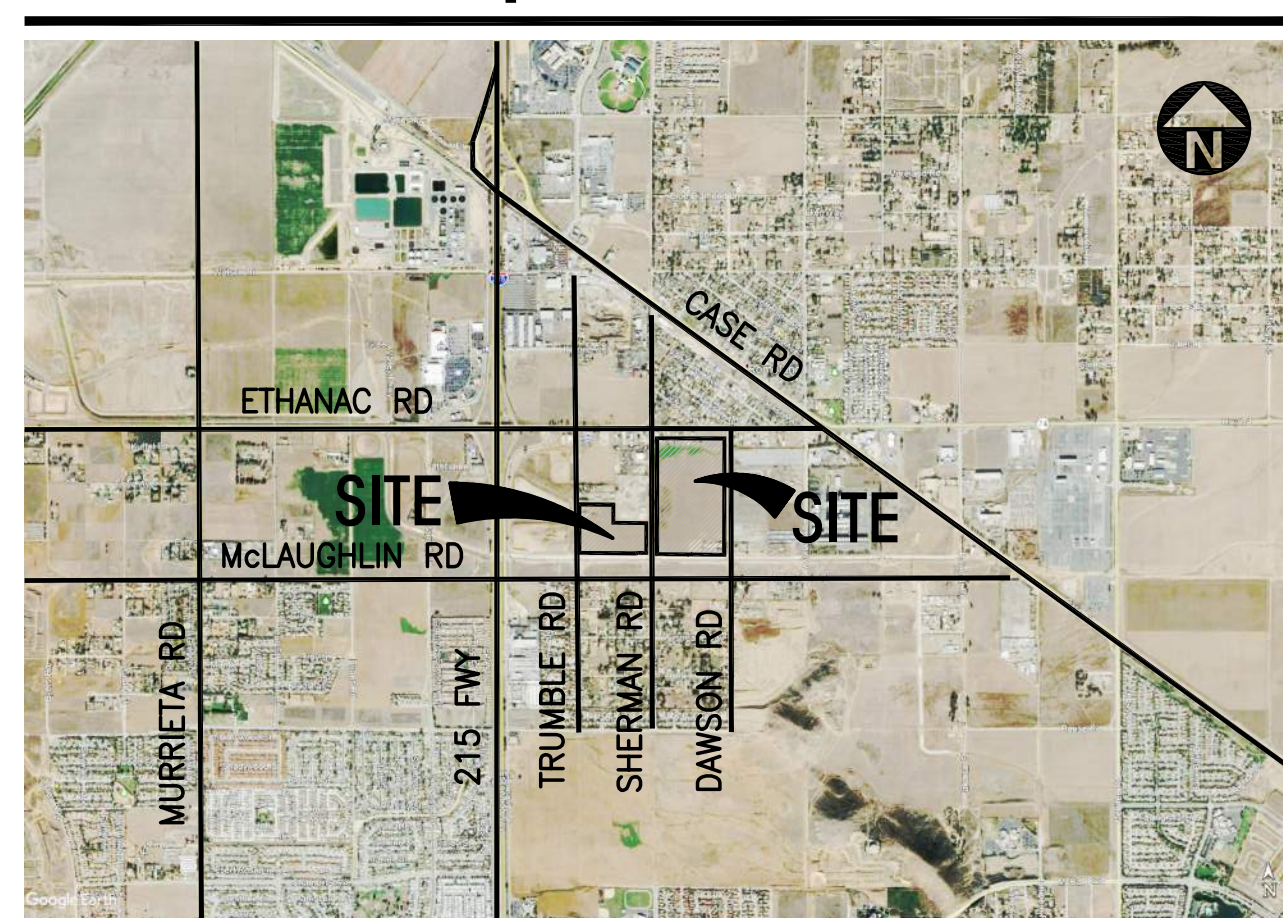
Core 5 Warehouse Project - Total

Vehicle Type	PCE Factor ¹	Units ²	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Proposed Project Trip Generation (classification, non-PCE)									
<i>Passenger Cars</i>	-	1,540 KSF	7,654	849	190	1,039	544	880	1,424
<i>2-axle Trucks</i>	-		76	3	3	6	3	3	6
<i>3-axle Trucks</i>	-		93	3	3	6	3	4	7
<i>4-axle Trucks</i>	-		282	10	9	19	11	11	22
Total				8,105	865	205	1,070	561	898
Passenger Car Equivalent (PCE) Project Trip Generation									
<i>Passenger Cars</i>	1	1,540 KSF	7,654	849	190	1,039	544	880	1,424
<i>2-axle Trucks</i>	1.5		114	5	5	10	5	5	10
<i>3-axle Trucks</i>	2		186	6	6	12	6	8	14
<i>4-axle Trucks</i>	3		846	30	27	57	33	33	66
Total				8,800	890	228	1,118	588	926

¹ PCE factors per San Bernardino County Transportation Authority

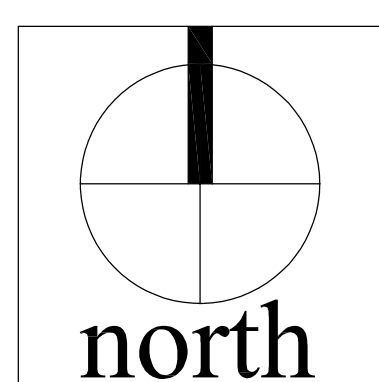
² KSF = 1,000 square feet gross floor area

Aerial Map



Legend

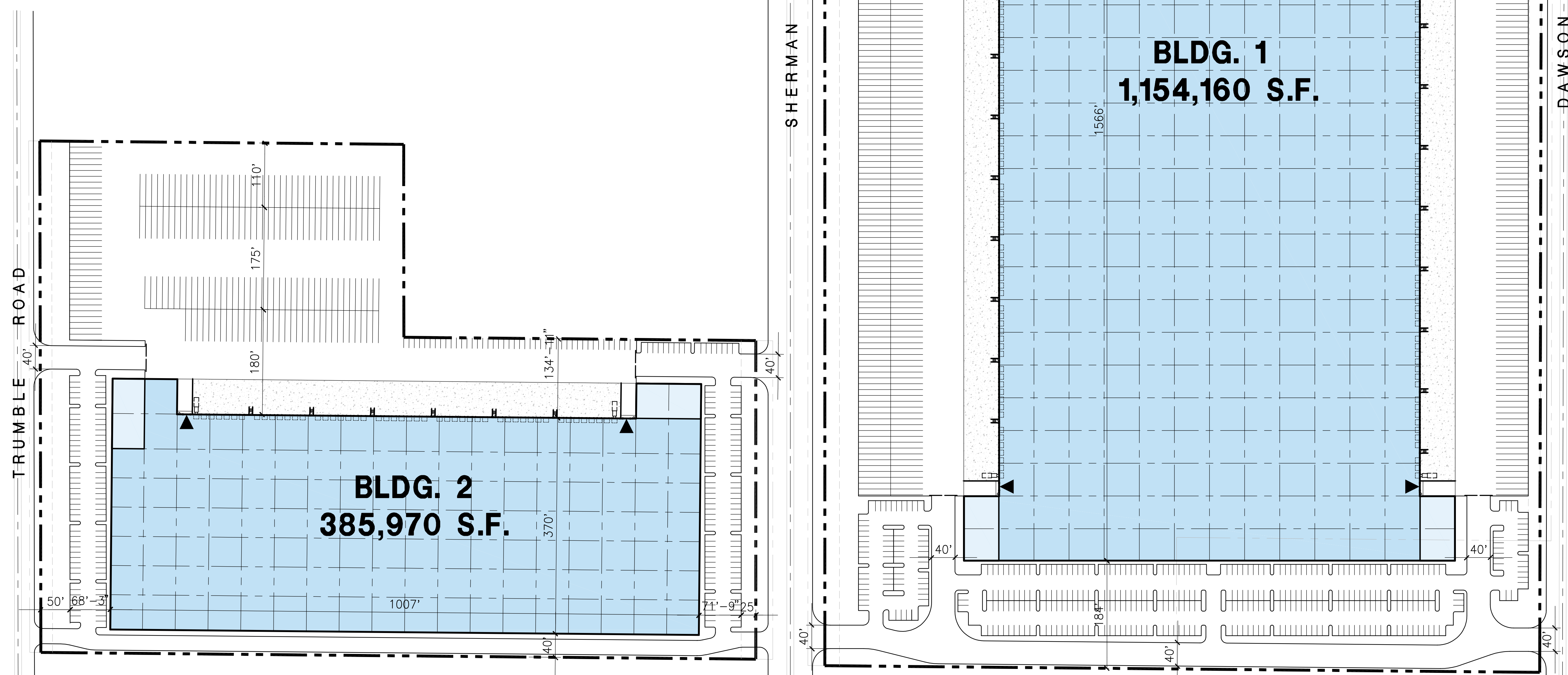
- POTENTIAL OFFICE
- WAREHOUSE
- DRIVE THRU DOOR



Note: This is a conceptual plan. It is based on preliminary information which is not fully verified and may be incomplete. It is meant as a comparative aid in examining alternate development strategies and any quantities indicated are subject to revision as more reliable information becomes available.

Tabulation

	BLDG. 1	BLDG. 2	TOTAL
SITE AREA			
In s.f.	2,295,005	871,552	3,166,557 s.f.
In acres	52.69	20.01	72.69 ac
BUILDING AREA			
Office	20,000	10,000	30,000 s.f.
Warehouse	1,134,160	375,970	1,510,130 s.f.
TOTAL	1,154,160	385,970	1,540,130 s.f.
COVERAGE			
	50.3%	44.3%	48.6%
AUTO PARKING REQUIRED			
Office: 1/250 s.f.	80	40	120 stalls
Whse: 1/2,000 s.f.	568	188	756 stalls
TOTAL	648	228	876 stalls
AUTO PARKING PROVIDED			
Standard (9' x 18')	606	228	834 stalls
TRAILER PARKING PROVIDED			
Trailer (10' x 55')	402	188	590 stalls
ZONING ORDINANCE FOR CITY			
Zoning Designation - Menifee North SP - P.A. 2 Industrial			
MAXIMUM BUILDING HEIGHT ALLOWED			
Height - to be verify			
MAXIMUM FLOOR AREA RATIO			
FAR - to be verify			
LANDSCAPE REQUIREMENT			
Percentage - to be verify			
SETBACKS			
to be verify			

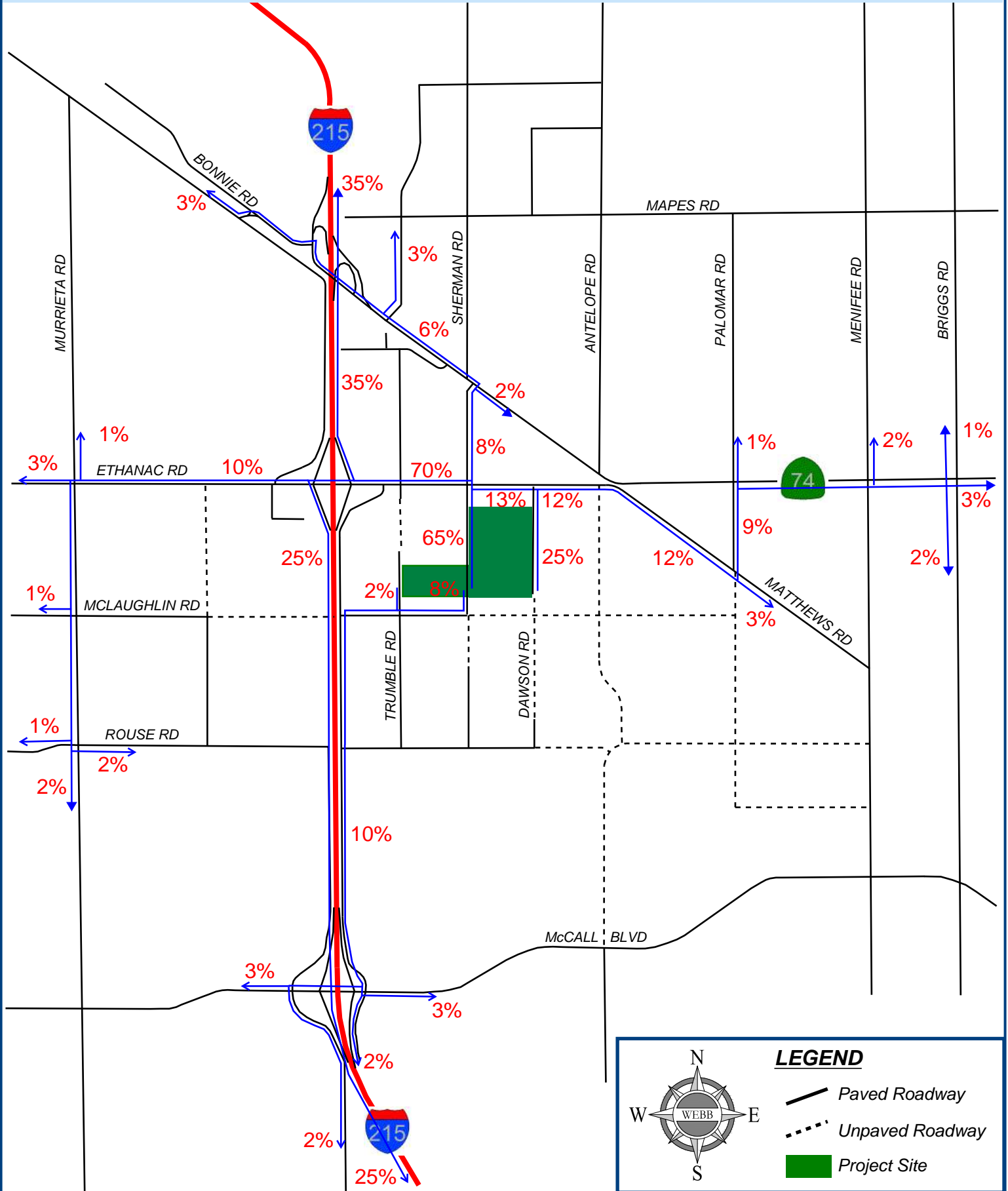


Conceptual Site Plan Ethanac Rd. and Sherman Rd.

Menifee, CA



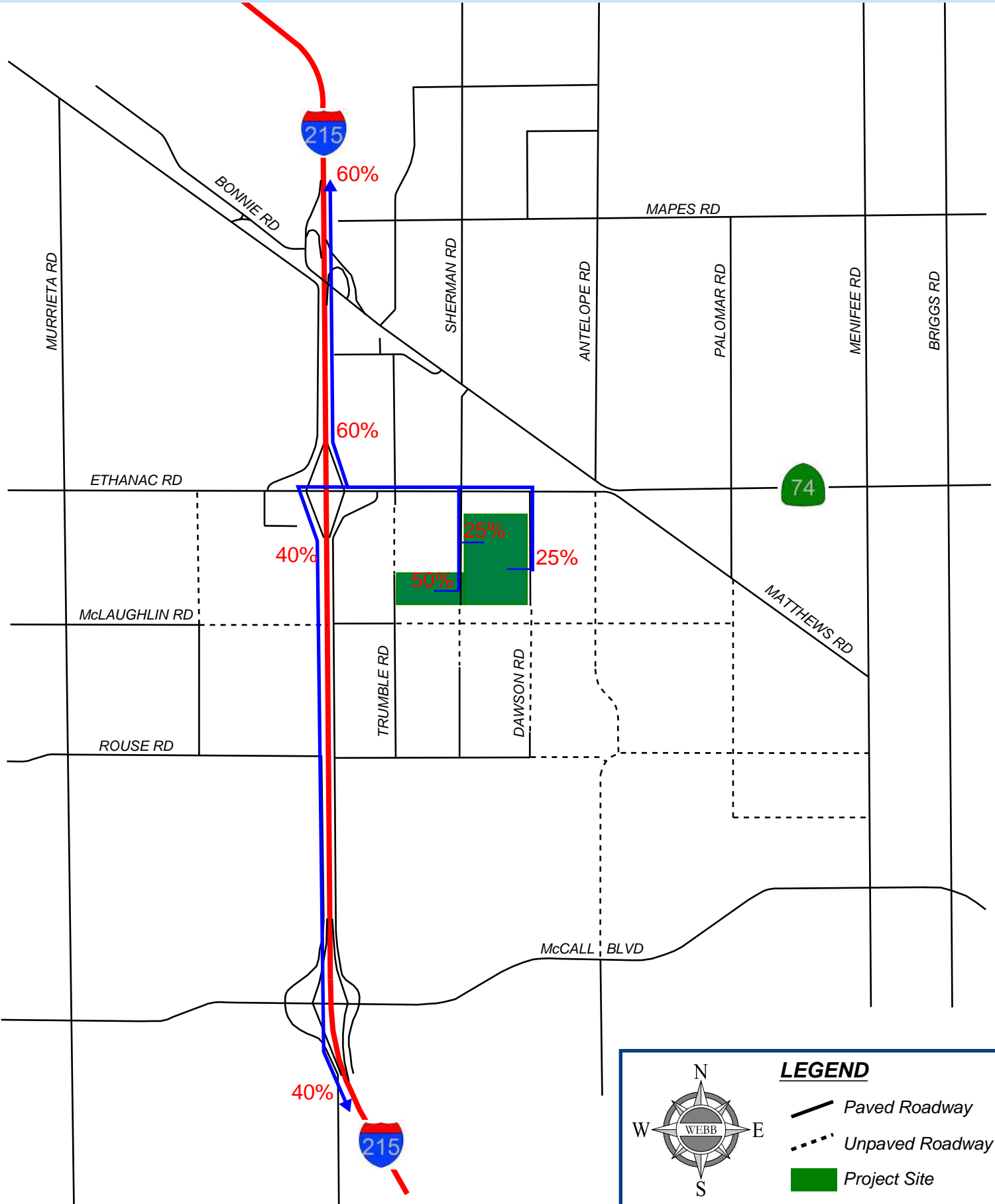
Passenger Car Distribution - Opening Year (2023)

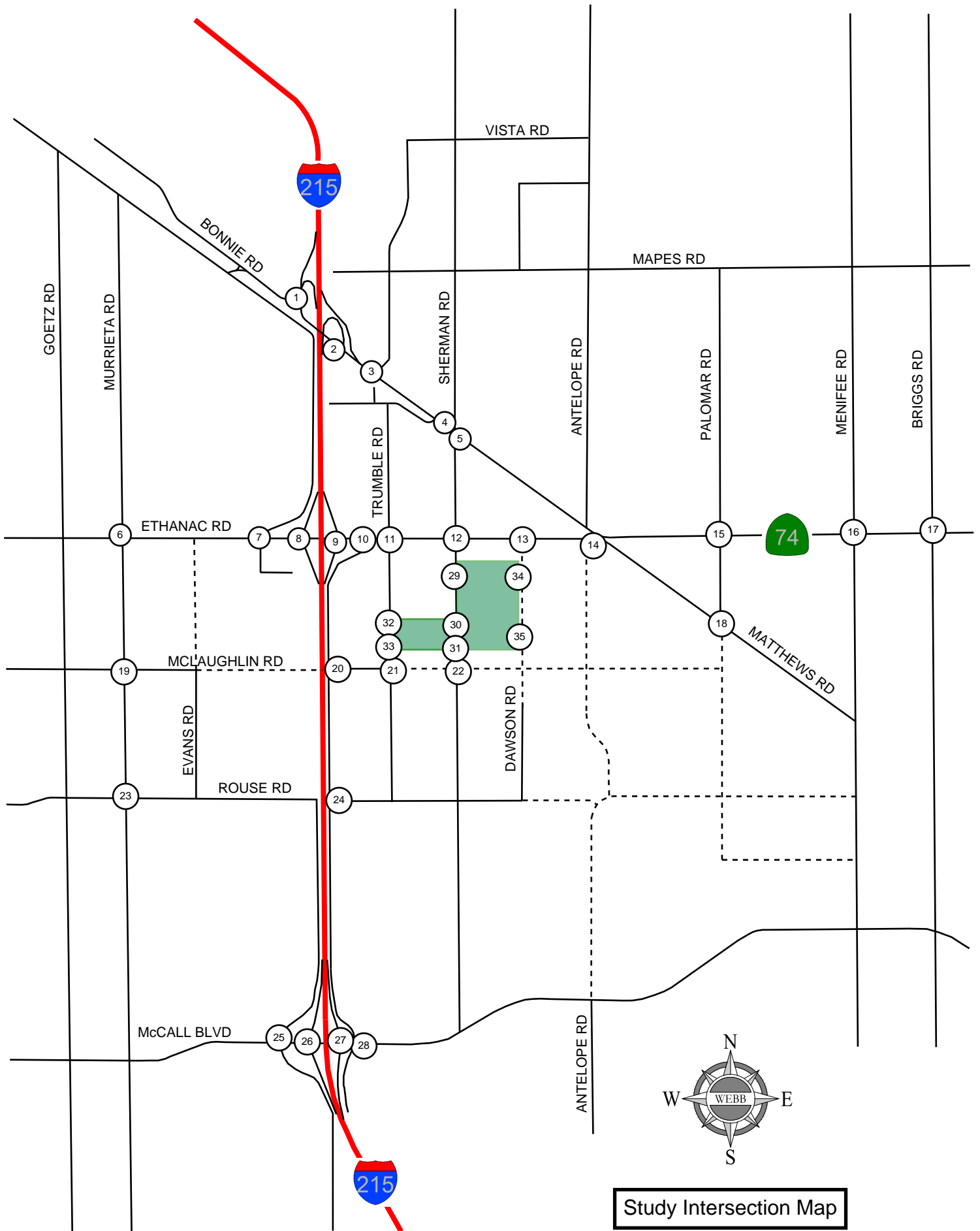


LEGEND

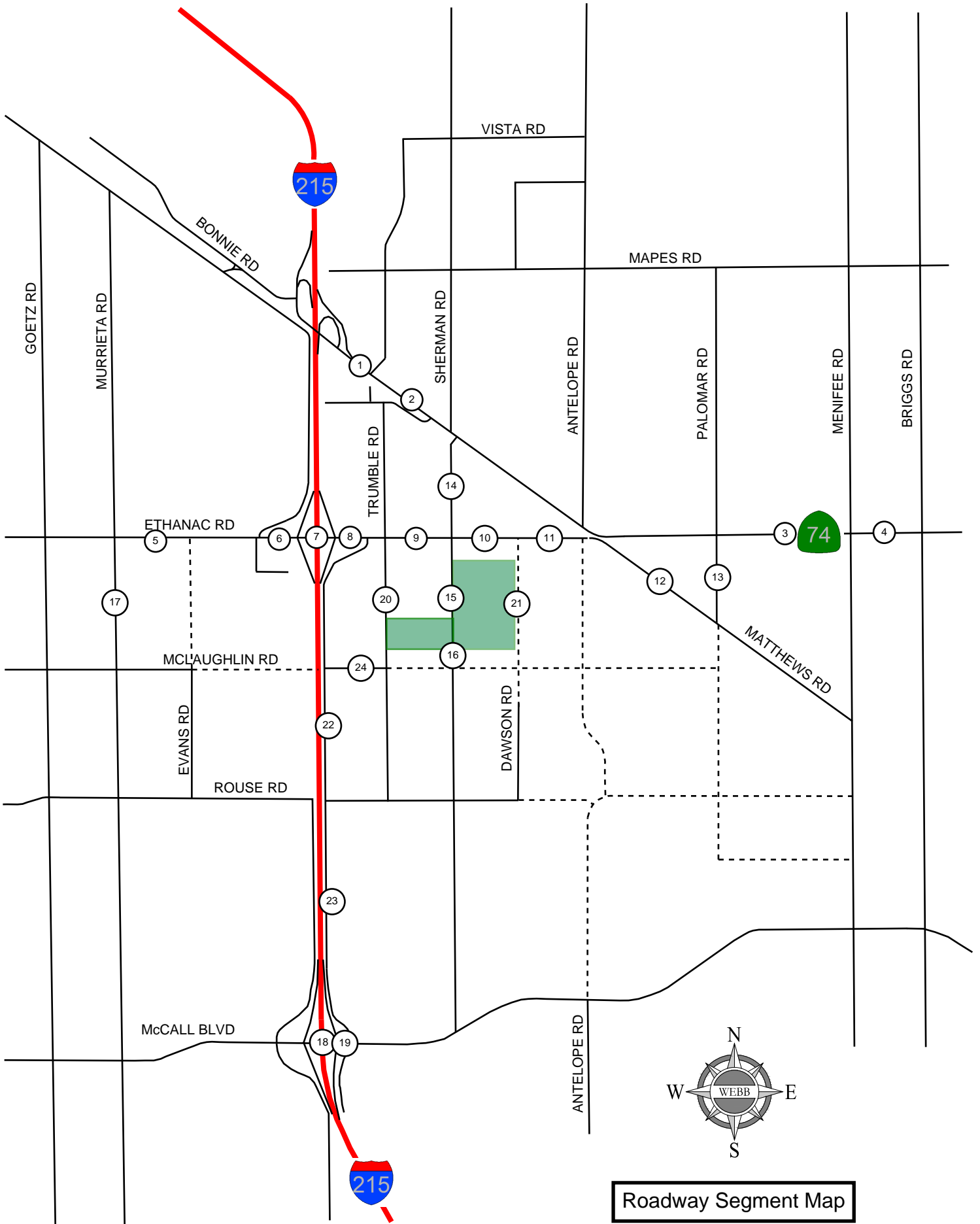
- Paved Roadway
- Unpaved Roadway
- Project Site

Truck Distribution - Opening Year (2023)





Study Intersection Map



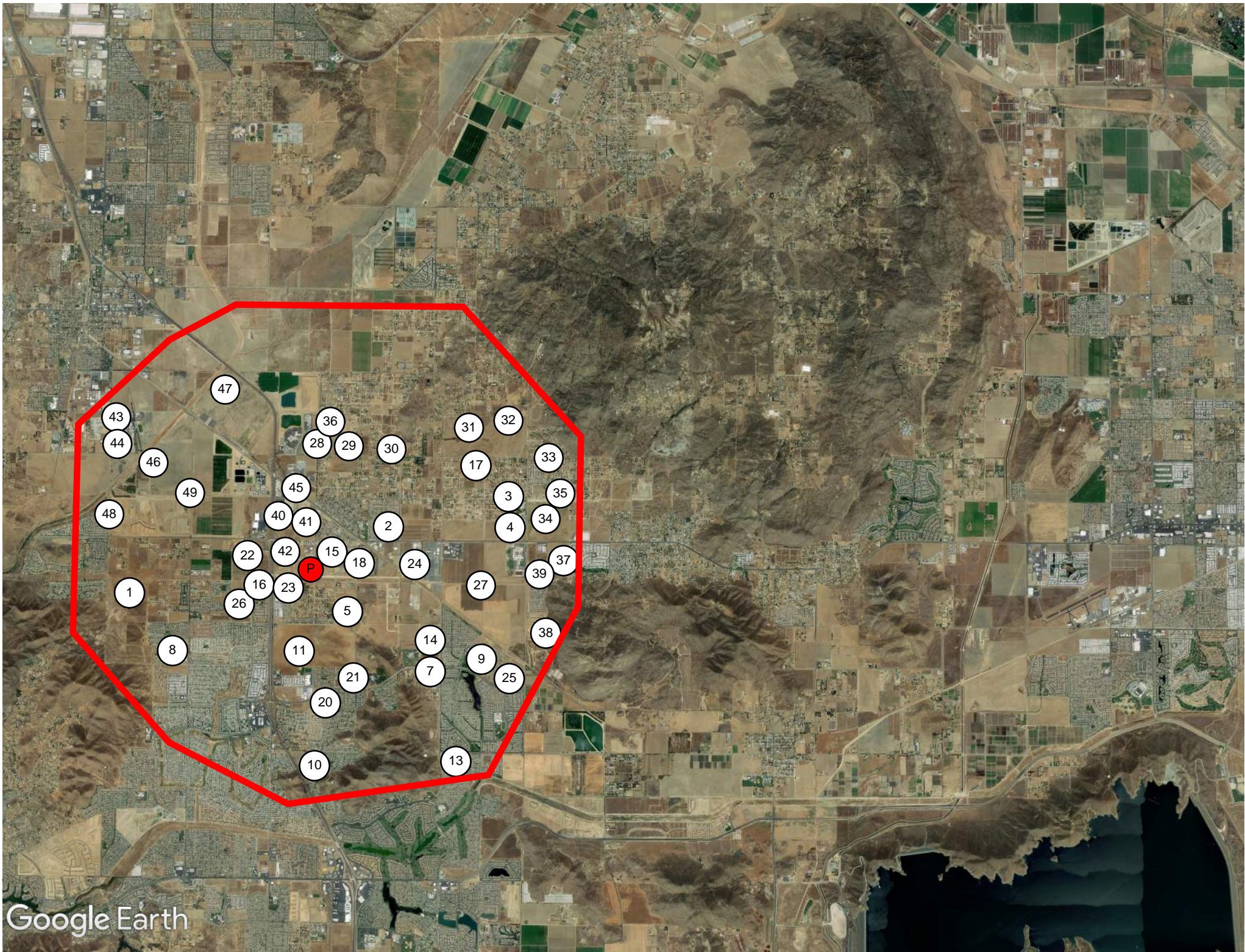
Roadway Segment Map

SCAQMD Warehouse Truck Study Truck Fleet Mix

Grouping	All Trucks	Actual %		
		2-Axle	3-Axle	4+ Axle
SCAQMD Composite	31.0%	6.8%	5.5%	18.7%
With Cold Storage	44.7%	15.5%	4.9%	24.3%
Without Cold Storage	27.5%	4.6%	5.7%	17.2%
Fontana Study	20.4%	3.5%	4.6%	12.3%

Grouping	All Trucks	Normalized %		
		2-Axle	3-Axle	4+ Axle
SCAQMD Composite	31.0%	21.9%	17.7%	60.3%
With Cold Storage	44.7%	34.7%	11.0%	54.4%
Without Cold Storage	27.5%	16.7%	20.7%	62.5%
Fontana Study	20.4%	17.2%	22.5%	60.3%

<https://www.aqmd.gov/docs/default-source/ceqa/handbook/high-cube-warehouse-trip-rate-study-for-a-ir-quality-analysis/finalswg071714backup.pdf?sfvrsn=2>



Cumulative Project Trip Generation

Project	Land Use	Qty	Unit	AM Peak Hour	PM Peak Hour	Daily
City of Menifee						
1. TTM 31856	Single Family Residential	79	DU	58	78	746
2. TTM 34118	Single Family Residential	85	DU	63	84	802
3. TTM 33738	Single Family Residential	52	DU	38	51	491
4. TTM 34600	Multi Family Residential	153	DU	113	151	1,444
5. TTM 29777	Single Family Residential	173	DU	128	171	1,633
6. TTM 29835	Single Family Residential	264	DU	195	261	2,492
7. CUP 3549 / 2017-089	Supermarket	43.8	TSF	167	405	4,677
	Retail	47	TSF	44	179	1,774
	Fast Food Restaurant with Drive Through	3.8	TSF	153	124	1,790
	Gas Station with Convenience Store	6	VFP	75	84	1,232
	Automated Car Wash	1	CWT		78	780
	<i>Sub-Total</i>			439	870	10,253
	<i>Internal Trips (10%)</i>			(44)	(87)	(1,025)
	<i>Pass-by Trips (PM: 36% Supermarket)</i>				(131)	(1,515)
	<i>Pass-by Trips (AM: 62% PM: 59% Gas Station)</i>			(42)	(45)	(654)
	<i>Pass-by Trips (PM:34% Retail Only)</i>				(55)	(543)
	<i>Pass-by Trips (AM:49% PM:50% Fast Food)</i>			(67)	(56)	(806)
<i>Total</i>			286	497	5,710	
8. TTM 31456	Single Family Residential	177	DU	131	175	1,671
9. TTM 34406	Single Family Residential	817	DU	605	809	7,712
10. PP 19469	Single Family Residential	221	DU	164	219	2,086
11. SP 2009-025	Single Family Residential	1080	DU	796	1,064	10,148
	Shopping Center	225	TSF	212	857	8,494
	<i>Sub-Total</i>			1,008	1,921	18,642
	<i>Internal Trips (10%)</i>			(101)	(192)	(1,864)
	<i>Pass-by Trips (PM: 34% Retail Only)</i>				(262)	(2,599)
<i>Total</i>			907	1,467	14,179	
12. 2012-120	Shopping Center	208	TSF	196	792	7,852
	<i>Pass-by Trips (PM: 34% Retail Only)</i>				(242)	(2,403)
	<i>Total</i>			196	792	7,852
13. TM 31582	Single Family Residential	40	DU	30	40	378
14. PP 2014-189	Single Family Residential	240	DU	178	238	2,266
15. PP 2011-093	Light Industrial	97.5	TSF	39	39	329
16. TR 2015-250	Single Family Residential	126	DU	93	125	1,189
17. TR 31536	Single Family Residential	44	DU	33	33	415

CWT= Car Wash Tunnel; TSF-Thousand Square Feet; VFP-Vehicle Fueling Positions; DU-Dwelling Unit

Trip Generation is based on ITE Trip Generation Manual 10th Edition

Project	Land Use	Qty	Unit	AM Peak Hour	PM Peak Hour	Daily
18. 2011-003	Light Industrial	21.7	TSF	9	9	73
19. 2016-110 CUP	Fast Food Restaurant with Drive Thru	2.4	TSF	96	78	1,130
	<i>Pass-by Trips (AM: 49% PM:50% Fast Food)</i>			(48)	(39)	(565)
	<i>Total</i>			48	39	565
20. PP 2016-124	Shopping Center	18.2	TSF	17	69	687
	<i>Pass-by Trips (PM: 34% Retail Only)</i>				(23)	(234)
	<i>Total</i>			17	46	453
21. 2016-183 CUP	Assisted Living	45.2	TSF	18	22	189
	Gas Station with Convenience Store	16	VFP	200	224	3,286
	Car Wash	2	CWT		155	
	Fast Food Restaurant with Drive Through	4.3	TSF	173	140	2,025
	<i>Sub-Total</i>			373	519	5,311
	<i>Internal Trips (10%)</i>			(37)	(52)	(531)
	<i>Pass-by Trips (AM: 62% PM: 59% Gas Station)</i>			(112)	(119)	(1834)
<i>Pass-by Trips (AM: 49% PM:50% Fast Food)</i>			(76)	(63)	(911)	
<i>Total</i>			148	285	2,035	
23. 2016-233 CUP	Automobile Sales	17.6	TSF	33	43	490
24. CUP 2016-263	Light Industrial	12.3	TSF	9	8	61
25. 2016-139 TR (Heritage Lake SP)	Single Family Residential	40	DU	30	40	378
26. TR 37400/2018-065	Single Family Residential	174	DU	129	172	1,643
27. Menifee Valley SP	<i>Total</i>			1,948	2,316	24,346
City of Menifee Total				5,742	8,287	82,758

CWT= Car Wash Tunnel; TSF-Thousand Square Feet; VFP-Vehicle Fueling Positions; DU-Dwelling Unit

Trip Generation is based on ITE Trip Generation Manual 10th Edition

Cumulative Project Trip Generation

Project	Land Use	Qty	Unit	AM Peak Hour	PM Peak Hour	Daily
County of Riverside						
28. TR25901	Single Family Residential	152	DU	112	150	1,435
29. TTM 37358	Single Family Residential	154	DU	114	152	1,454
30. TR31687	Single Family Residential	65	DU	48	64	614
31. TR35045	Single Family Residential	712	DU	527	705	6,721
32. SP00344	Single Family Residential	796	DU	589	583	7,514
33. TR24936	Single Family Residential	41	DU	30	41	387
34. TR29322	Single Family Residential	202	DU	149	200	1907
35. TTM37533	Single Family Residential	363	DU	269	359	3,427
36. TR37728	Single Family Residential	234	DU	173	232	2,209
37. TR30972	Single Family Residential	91	DU	67	90	859
38. TR36430	Single Family Residential	340	DU	252	337	3,210
39. SP360A3	Residential		Total	249	306	4,063
County of Riverside (North Area) Total				2,579	3,219	33,800
City of Perris						
40. Classic Pacific (PUD) E of I-215 btw Watson and Ethanac Rd	Industrial Park	387.9	TSF	155	155	1,307
41. Quick Quick Carwash E of Case Rd and North of Ethanac Rd	Car Wash	3.6	TSF		42	
42. Motte Town Center (MTC) SE Corner of Ethanac and Trumble	Retail	484	TSF	455	1,844	18,271
	<i>Pass-by Trips (PM:34% Retail Only)</i>				(627)	(6,212)
	<i>Total</i>			455	1,217	12,059
43. IDI - Site 1 SW Corner of Mountain Rd & Goetz Road	Warehouse	784	TSF	63	78	1,088
44. IDI Site 2 SW Corner of Mapes and Goetz	Warehouse	3448.7	TSF	362	326	2,564
45. Marijuana Manufacturing S side of Illinois & E. I-215 Freeway	Marijuana Manufacturing	12	TSF	125	262	3,032
46. Tract 32666 WSI Mojave Inc. Mapes & Ethanac	Single Family Residential	665	DU	492	658	6,278
47. Tract 33973 County Lands PIP IV	Single Family Residential	384	DU	284	380	3,625
48. Tract 37223 Raintree Investments GVSP Watson and Murrieta	Single Family Residential	258	DU	191	255	2,436
49. Tract 37262 Raintree Investment GSP Ethanac and Goetz	Single Family Residential	212	DU	157	210	2,001
City of Perris Total				2,284	3,583	34,390
Total Cumulative Project Trip Generation				10,605	15,089	150,948

TSF- Thousand Square Feet; VFP-Vehicle Fueling Positions; DU-Dwelling Unit
 Trip Generation is based on ITE Trip Generation Manual 10th Edition

DEPARTMENT OF TRANSPORTATION

OFFICE OF THE DEPUTY DISTRICT DIRECTOR

DISTRICT 8, PLANNING

464 W. 4TH STREET, 6TH FLOOR MS-1221

SAN BERNARDINO, CA 92401

MAIN (909) 383-4561

PHONE (909) 383-4147

TTY 711

www.dot.ca.gov*Making Conservation
a California Way of Life.*

March 9, 2020

File No.: Riv-215 PM 22.75
C/S: McLaughlin Road & Trumble RoadDilesh R. Sheth, PE/ TE
Albert A. Webb Associates
3788 McCray Street
Riverside, CA 92506

Menifee Fulfillment Center, Traffic Impact Study Scoping Agreement

Mr. Sheth

We have completed our review of the Scoping Agreement for the Traffic Impact Study being prepared for the above referenced development project. The Menifee Fulfillment Center Project is located north of McLaughlin Road between Trumble Road and Dawson Road, and proposes construction and operation of a 1,200,000 square foot Fulfillment Center Warehouse and 400,000 square foot warehouse. (APNs 331-110-041, 331-140-010 & 331-140-025.)

For this Fulfillment Center traffic study, we recommend including ramp merge/diverge analysis at all Interstate 215 interchanges located within the study area identified for analysis. When traffic analysis is complete, please submit copies of the analysis to this Office for review and comment as to identified impacts, appropriate mitigation measures and Caltrans encroachment permit requirements.

We appreciate the opportunity to offer our recommendations for project analysis and look forward to working together to address any traffic impact concerns affecting I-215 interchange operations. If you have any questions regarding this letter, please contact Talvin L. Dennis at (909) 806-3957 or me at (909) 806-3923 for assistance.

Sincerely,

A handwritten signature in blue ink that reads "Rosa F. Clark".

ROSA F. CLARK
Office Chief
Local Development / Intergovernmental Review

Appendix B

Proposed Project Site Plan

LEGAL DESCRIPTION / APN

THIS PROPERTY SURVEYED AND SHOWN HEREON IS THE SAME PROPERTY AS DESCRIBED IN EXHIBIT A OF FIRST AMERICAN TITLE INSURANCE COMPANY COMMITMENT FOR TITLE INSURANCE ORDER NO. NCS0986347-0N11 WITH COMMITMENT DATE OF JUNE 30, 2020.

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF MENIFEE, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

PARCEL 1:

ALL THAT PORTION OF LOT SIXTY-EIGHT (68), AS SHOWN ON MAPS OF TRUMBLE FARMS ON FILE IN MAP BOOK 11, AT PAGE 38 THEREOF, RECORDS OF RIVERSIDE COUNTY, CALIFORNIA DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE EAST LINE OF SAID LOT 68, SAID POINT BEARS SOUTH 0° 11' 15" EAST A DISTANCE OF 66 FEET FROM THE NORTHEAST CORNER OF SAID LOT 68; THENCE NORTH 89° 43' WEST A DISTANCE OF 661.37 FEET; THENCE SOUTH 0° 15' EAST A DISTANCE OF 66 FEET; THENCE SOUTH 89° 43' EAST A DISTANCE OF 661.31 FEET TO THE EAST BOUNDARY OF SAID LOT 68; THENCE 0° 11' 15" WEST ALONG THE EAST BOUNDARY OF SAID LOT 68 A DISTANCE OF 66 FEET TO THE POINT OF BEGINNING.

PARCEL 2:

LOT 37, 38, 39, 58, 59 OF TRUMBLE FARMS, IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS SHOWN BY MAP ON FILE IN BOOK 11, PAGE 38 OF MAPS RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

EXCEPTING THEREFROM THE NORTH 66.00 FEET OF THE SOUTH 198.00 FEET OF LOT 37.

ALSO EXCEPTING THEREFROM THAT PORTION CONVEYED TO RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT AS SHOWN IN DOCUMENT RECORDED SEPTEMBER 12, 2014 INSTRUMENT NUMBERS 2014-0347907 AND 2014-0347908, BOTH OF OFFICIAL RECORDS.

PARCEL 3:

LOT 66, 67, 68, 69, 70, 71, 91, 92, 93, 94 AND 95 OF TRUMBLE FARMS, IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS SHOWN BY MAP ON FILE IN BOOK 11, PAGE 38 OF MAPS, RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

EXCEPT THE SOUTH 66.00 FEET OF THE NORTH 132.00 FEET OF LOT 68.

ALSO EXCEPT THE NORTH 66.00 FEET OF LOT 95.

FURTHER EXCEPTING THEREFROM THAT PORTION CONVEYED TO RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT AS SHOWN IN DOCUMENT RECORDED SEPTEMBER 12, 2014 INSTRUMENT NUMBER 2014-0347909, OF OFFICIAL RECORDS.

PARCEL 4:

THAT PORTION OF LOT 37 OF TRUMBLE FARMS, IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS SHOWN BY MAP ON FILE IN BOOK 11, PAGE 38 OF MAPS, RECORDS OF RIVERSIDE COUNTY, CALIFORNIA BY METES AND BOUNDS, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE EASTERLY LINE OF SAID LOT WHICH BEARS SOUTH 0° 18' MINUTES 43 SECONDS EAST, 132 FEET FROM THE NORTHEAST CORNER OF SAID LOT;

THENCE NORTH 89° 43' MINUTES WEST, 640.98 FEET TO THE WESTERLY LINE OF SAID LOT;

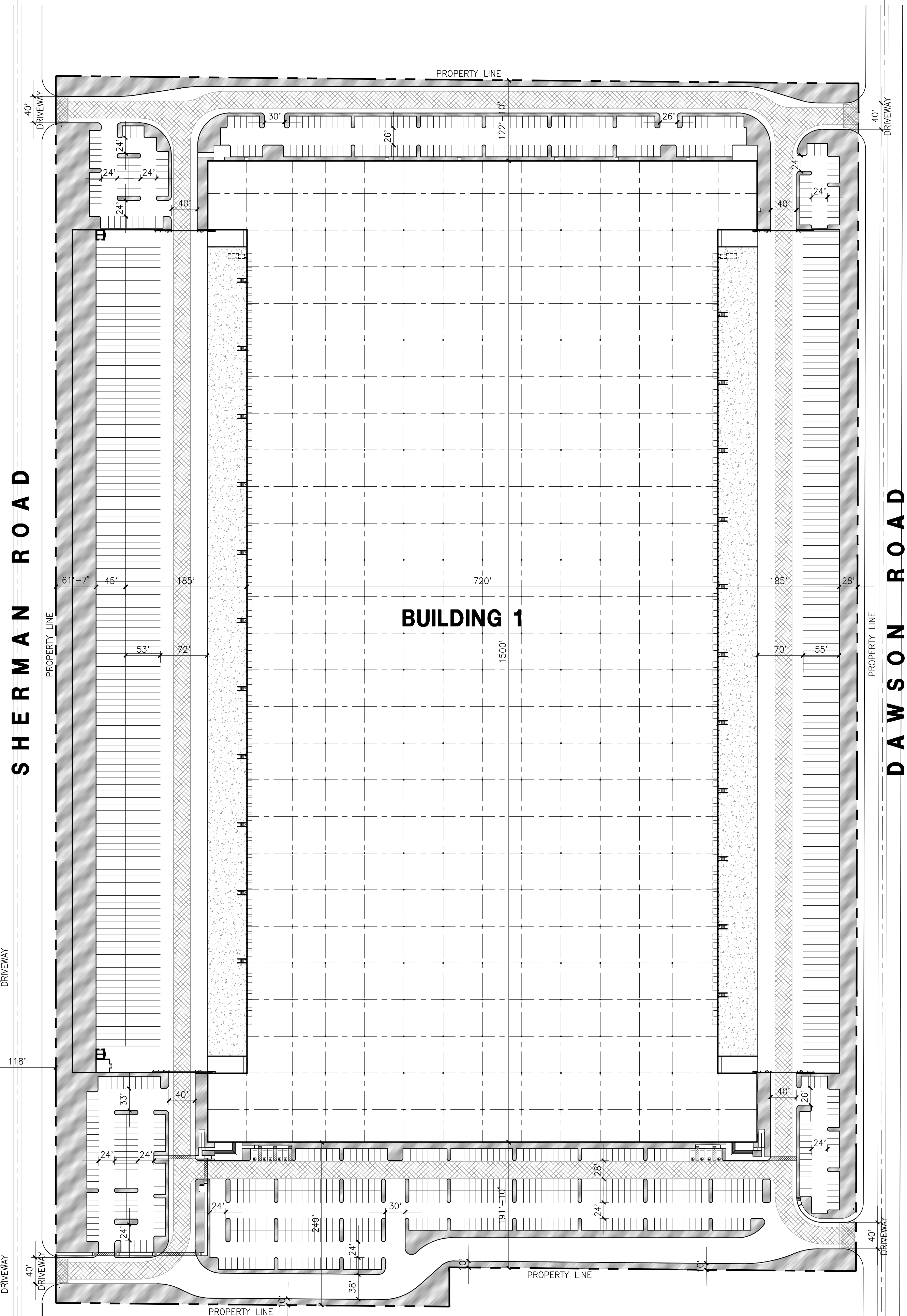
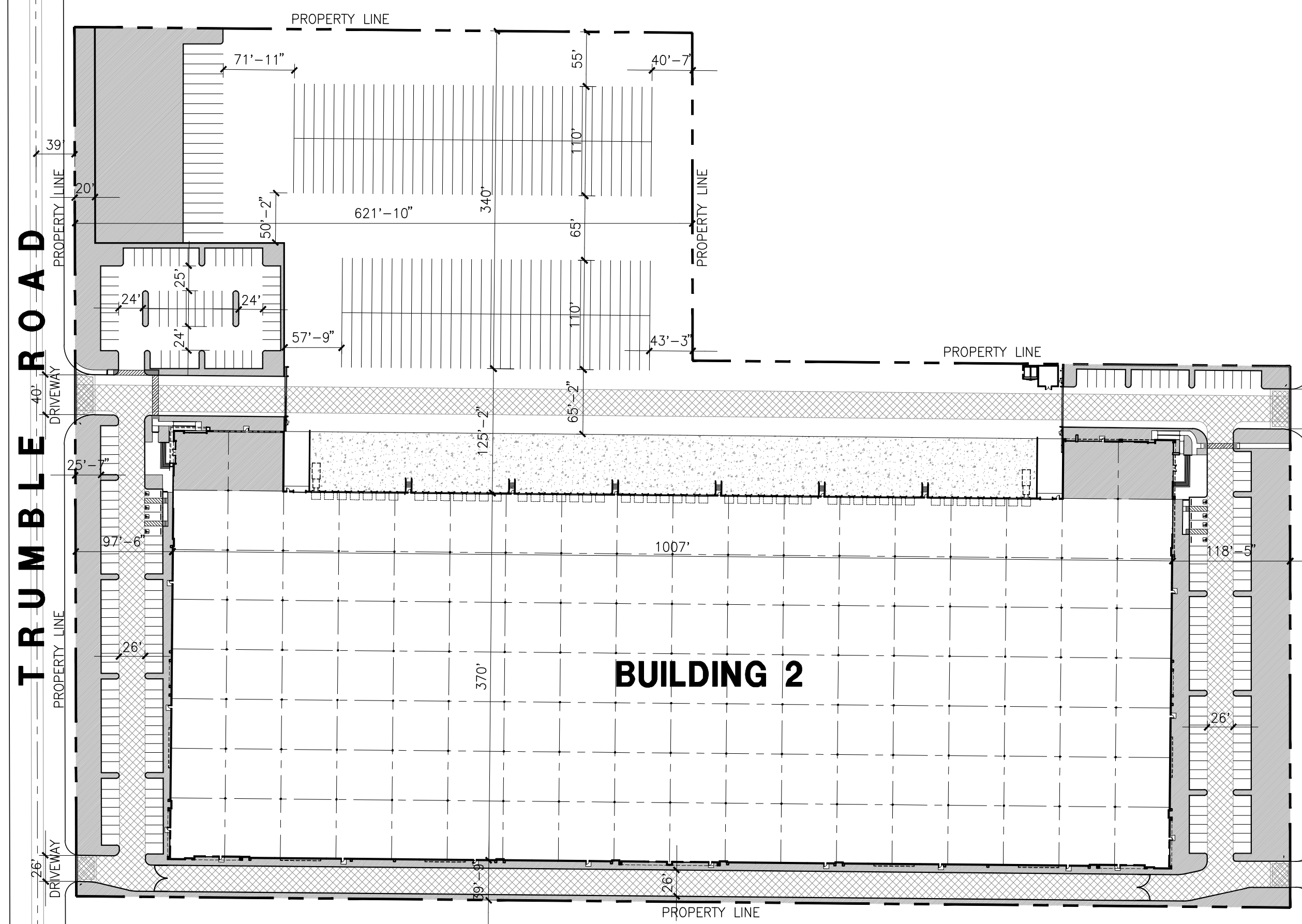
THENCE SOUTH 0° 22' MINUTES, 30 SECONDS EAST ON THE WESTERLY LINE, 66 FEET;

THENCE SOUTH 89° 43' MINUTES EAST, 640.91 FEET TO THE EASTERLY LINE OF SAID LOT;

THENCE NORTH 0° 45 SECONDS WEST, 66 FEET TO THE POINT OF BEGINNING.

PURSUANT TO CERTIFICATE OF COMPLIANCE NO. 5540 RECORDED JANUARY 8, 2004 AS INSTRUMENT NO. 04-12423, OF OFFICIAL RECORDS.

FOR CONVEYANCING PURPOSES ONLY; APN 331-140-010-1 (AFFECTS PARCEL 1); 331-110-041-6 (AFFECTS PORTION OF PARCEL 2); 331-110-035-1 (AFFECTS PORTION OF PARCEL 2); 331-140-025-5 (AFFECTS PARCEL 3) AND 331-110-027-4 (AFFECTS PARCEL 4)



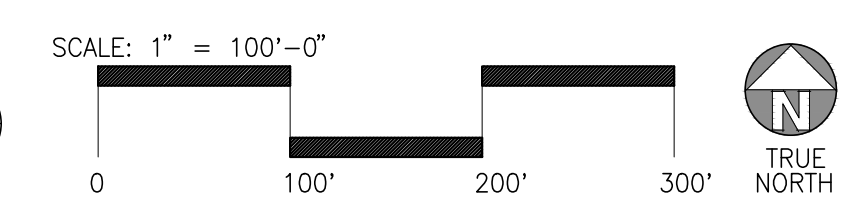
TRUMBLE ROAD

SHERMAN ROAD

DAWSON ROAD

MASTER SITE PLAN

scale: 1" = 100'-0"



PROPERTY OWNER/APPLICANT

CORE 5 INDUSTRIAL PARTNERS
300 SPECTRUM CENTER DRIVE SUITE 880
IRVINE, CA 92618
O 949.467.3290
JON KELLY

ADDRESS OF THE PROPERTY

TBD

ZONING

EXISTING ZONING: HEAVY INDUSTRIAL /SP 260 BUSINESS PARK
PROPOSED ZONING: SP 260
EXISTING GENERAL PLAN USE: HEAVY INDUSTRIAL /SP 260 BUSINESS PARK
PROPOSED GENERAL PLAN USE: SP 260
EXISTING LAND USE: VACANT/RESIDENTIAL
PROPOSED LAND USE: WAREHOUSE

APPLICANT'S REPRESENTATIVE

HPA, INC.
18831 BARDEEN AVE SUITE 100
IRVINE, CA 92612
TEL: 949-862-2116
ATTN: STEVE HONG

UTILITY COMPANIES

WATER/SEWER: EMWD
ELECTRIC: SCE
GAS: SOCAL GAS
TELEPHONE: FRONTIER COMMUNICATIONS

SCHOOL DISTRICT

ROMOLAND & PERRIS UNION HIGH SCHOOL DISTRICTS

VICINITY MAP

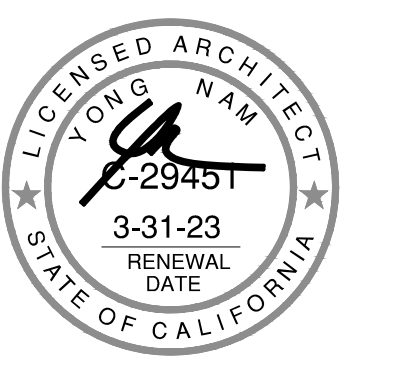


PROJECT DATA

	BLDG. 1	BLDG. 2	TOTAL
SITE AREA			
In s.f.	2,257,803	871,552	3,129,355 s.f.
In acres	51.83	20.01	71.84 ac
BUILDING AREA			
Office	20,000	10,000	30,000 s.f.
Mezzanine	100,000		100,000 s.f.
Warehouse	1,095,440	375,970	1,471,410 s.f.
TOTAL	1,215,440	385,970	1,601,410 s.f.
COVERAGE			
	53.8%	44.3%	51.2%
AUTO PARKING REQUIRED			
Office: 1/250 s.f.	80	40	120 stalls
Whse: 1/2,000 s.f.	598	188	786 stalls
TOTAL	678	228	906 stalls
AUTO PARKING PROVIDED			
Standard (9' x 18')	679	232	911 stalls
TRAILER PARKING PROVIDED			
Trailer (10' x 55')	369	154	523 stalls
ZONING ORDINANCE FOR CITY			
Zoning Designation - Menifee North SP - P.A. 2 Industrial			
MAXIMUM BUILDING HEIGHT ALLOWED			
Height - TBD			
MAXIMUM FLOOR AREA RATIO			
FAR - TBD			
LANDSCAPE REQUIREMENT			
Percentage - TBD			
SETBACKS			
25' Industrial Collector			



hpa, inc.
18831 bardeen avenue - ste. #100
irvine, ca
92612
tel: 949-863-1770
fax: 949-863-0851
email: hpa@hparchs.com



300 Spectrum Center Drive Suite 880
Irvine CA 92618
949-467-3290
ATTN: Jon Kelly

Project:
ETHANAC & SHERMAN

ETHANAC RD. & SHERMAN RD.
MENIFEE, CA

Consultants:

CIVIL	WEBB
STRUCTURAL	-
MECHANICAL	-
PLUMBING	-
ELECTRICAL	HUNTER
LANDSCAPE	-
FIRE PROTECTION	-
SOILS ENGINEER	-

Title: **MASTER SITE PLAN**

Project Number: 19567
Drawn by: CR
Date: 7/7/21
Revision:

Sheet:

DAB-A1.0

OFFICIAL USE ONLY

Appendix C

Existing Traffic Volume Data

Appendix C-1

Intersection Volume Data

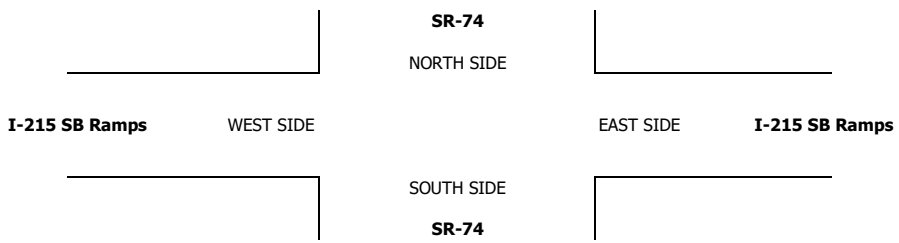
INTERSECTION TURNING MOVEMENT COUNTS

DATE: 1/22/19 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Menifee SR-74 I-215 SB Ramps	PROJECT #: LOCATION #: CONTROL:	SC2048 1 SIGNAL
-----------------------------	---	------------------------------------	---------------------------------------	-----------------------

PCE Adjusted	NOTES:								AM PM MD OTHER OTHER	▲ N ◀ W S ▼	E ▶
	Class	1	2	3	4	5	6	7			
	Factor	1	1.5	2	3	2	2				

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL	U-TURNS				
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR		NB	SB	EB	WB	TTL
	1	1	X	X	1	1	1	X	1	X	X	X						

	AM																				
	7:00 AM	7:15 AM	7:30 AM	7:45 AM	8:00 AM	8:15 AM	8:30 AM	8:45 AM	9:00 AM	9:15 AM	9:30 AM	9:45 AM		VOLUMES	APPROACH %	APP/DEPART	BEGIN PEAK HR	VOLUMES	APPROACH %	PEAK HR FACTOR	APP/DEPART
	185	68	0	0	198	1	9	0	43	0	0	0	502								
	200	101	0	0	151	9	9	0	49	0	0	0	517								
	164	114	0	0	176	7	9	0	33	0	0	0	502								
	160	133	0	0	132	3	11	0	55	0	0	0	493								
	56	110	0	0	177	7	6	0	32	0	0	0	386								
	57	75	0	0	193	7	1	0	51	0	0	0	383								
	56	69	0	0	197	9	9	0	33	0	0	0	371								
	49	101	0	0	133	4	3	0	35	0	0	0	325								
	0	0	0	0	0	0	0	0	0	0	0	0	0								
	0	0	0	0	0	0	0	0	0	0	0	0	0								
	0	0	0	0	0	0	0	0	0	0	0	0	0								
	0	0	0	0	0	0	0	0	0	0	0	0	0								
	0	0	0	0	0	0	0	0	0	0	0	0	0								
	925	769	0	0	1,355	46	55	0	328	0	0	0	3,478	0	0	0	0	0	0	0	0
	55%	45%	0%	0%	97%	3%	14%	0%	86%	0%	0%	0%									
	1,694	/	824	1,401	/	1,683	383	/	0	0	/	971	0								
	708	7:00 AM	415	0	0	656	20	37	0	178	0	0	0	2,013							
	63%	37%	0%	0%	97%	3%	17%	0%	83%	0%	0%	0%									
		0.934			0.851			0.825		0.000			0.973								
	1,123	/	452	676	/	834	215	/	0	0	/	728	0								
	0	0	0	0	0	0	0	0	0	0	0	0	0								
	0	0	0	0	0	0	0	0	0	0	0	0	0								
	0	0	0	0	0	0	0	0	0	0	0	0	0								
	0	0	0	0	0	0	0	0	0	0	0	0	0								
	50	69	0	0	236	9	11	0	67	0	0	0	442								
	49	73	0	0	202	9	7	0	80	0	0	0	419								
	64	95	0	0	235	7	9	0	83	0	0	0	493								
	62	65	0	0	232	5	2	0	77	0	0	0	442								
	66	115	0	0	222	7	2	0	70	0	0	0	482								
	46	61	0	0	210	7	12	0	88	0	0	0	423								
	50	74	0	0	223	11	8	0	73	0	0	0	438								
	58	78	0	0	212	3	23	0	80	0	0	0	453								
	444	628	0	0	1,771	58	73	0	616	0	0	0	3,589	0	0	0	0	0	0	0	0
	41%	59%	0%	0%	97%	3%	11%	0%	89%	0%	0%	0%									
	1,072	/	701	1,829	/	2,387	689	/	0	0	/	502	0								
	238	4:30 PM	336	0	0	899	26	25	0	317	0	0	0	1,839							
	41%	59%	0%	0%	97%	3%	7%	0%	93%	0%	0%	0%									
		0.791			0.955			0.854		0.000			0.934								
	573	/	360	925	/	1,216	342	/	0	0	/	264	0								



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
1/22/19
TUESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

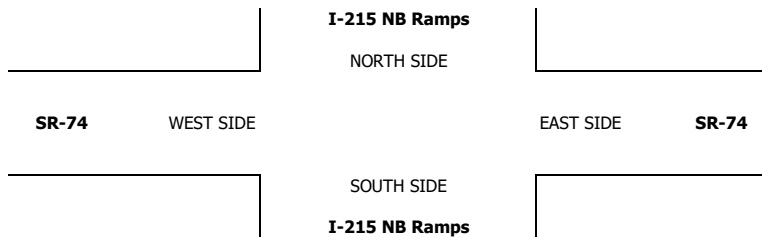
Menifee
I-215 NB Ramps
SR-74

PROJECT #: SC2048
LOCATION #: 2
CONTROL: SIGNAL

PCE Adjusted	NOTES:										AM PM MD OTHER OTHER	▲ N ◀ W S ▼	▶ E
	Class	1	2	3	4	5	6	7	8	9			
	Factor	1	1.5	2	3	2	2	2	2	2			

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			U-TURNS				
	NL X	NT X	NR X	SL 0.5	ST X	SR 0.5	EL 1	ET 2	ER X	WL X	WT 2	WR 1	TOTAL	NB	SB	EB	WB

AM	7:00 AM	0	0	0	47	0	121	6	235	0	0	133	143	683					0
	7:15 AM	0	0	0	69	0	95	2	198	0	0	206	113	681					0
	7:30 AM	0	0	0	80	0	70	4	205	0	0	208	101	667					0
	7:45 AM	0	0	0	43	0	35	10	176	0	0	258	135	655					0
	8:00 AM	0	0	0	46	0	16	15	194	0	0	149	229	647					0
	8:15 AM	0	0	0	28	0	9	2	240	0	0	124	204	605					0
	8:30 AM	0	0	0	32	0	6	1	229	0	0	120	180	567					0
	8:45 AM	0	0	0	28	0	3	3	164	0	0	147	181	526					0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	VOLUMES	0	0	0	370	0	354	42	1,638	0	0	1,343	1,284	5,030	0	0	0	0	0
APPROACH %	0%	0%	0%	51%	0%	49%	2%	98%	0%	0%	51%	49%							
APP/DEPART	0	/	1,325	724	/	0	1,679	/	2,008	2,627	/	1,697	0						
BEGIN PEAK HR	7:00 AM																		
VOLUMES	0	0	0	238	0	321	21	812	0	0	804	491	2,686						
APPROACH %	0%	0%	0%	43%	0%	57%	3%	97%	0%	0%	62%	38%							
PEAK HR FACTOR	0.000			0.833			0.868			0.825			0.983						
APP/DEPART	0	/	512	558	/	0	833	/	1,050	1,295	/	1,124	0						
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:00 PM	0	0	0	45	0	10	1	303	0	0	110	171	639					0
	4:15 PM	0	0	0	65	0	10	8	275	0	0	112	176	644					0
	4:30 PM	0	0	0	51	0	12	2	314	0	0	147	186	712					0
	4:45 PM	0	0	0	64	0	11	2	306	0	0	116	185	684					0
	5:00 PM	0	0	0	58	0	5	0	293	0	0	176	214	745					0
	5:15 PM	0	0	0	70	0	7	3	295	0	0	105	173	653					0
	5:30 PM	0	0	0	81	0	9	3	292	0	0	112	219	716					0
	5:45 PM	0	0	0	92	0	14	1	290	0	0	122	131	649					0
	VOLUMES	0	0	0	525	0	77	20	2,366	0	0	999	1,453	5,440	0	0	0	0	0
APPROACH %	0%	0%	0%	87%	0%	13%	1%	99%	0%	0%	41%	59%							
APP/DEPART	0	/	1,473	602	/	0	2,386	/	2,891	2,452	/	1,076	0						
BEGIN PEAK HR	4:45 PM																		
VOLUMES	0	0	0	272	0	32	8	1,186	0	0	509	791	2,797						
APPROACH %	0%	0%	0%	89%	0%	11%	1%	99%	0%	0%	39%	61%							
PEAK HR FACTOR	0.000			0.844			0.969			0.833			0.939						
APP/DEPART	0	/	799	304	/	0	1,194	/	1,458	1,300	/	541	0						



INTERSECTION TURNING MOVEMENT COUNTS

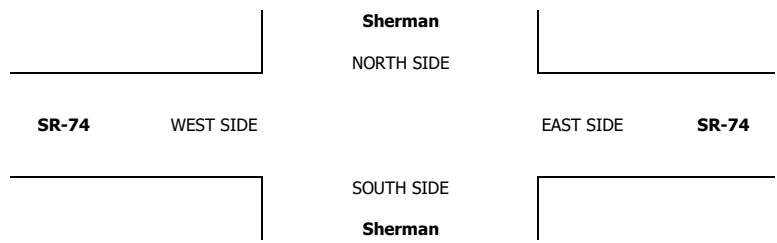
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: 1/22/19 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Menifee Sherman SR-74	PROJECT #: SC2048	LOCATION #: 4	SIGNAL CONTROL:
------------------------------------	--	------------------------------------	-----------------------------	-------------------------	---------------------------

PCE Adjusted	NOTES:								AM	▲ N	E ►	
	Class	1	2	3	4	5	6	7	8			MD
	Factor	1	1.5	2	3	2	2	2	2			OTHER
												OTHER

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL	U-TURNS				
	NL 0.5	NT 0.5	NR 1	SL X	ST X	SR 1	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0		NB	SB	EB	WB	TTL

AM	7:00 AM	14	4	23	0	0	10	0	221	2	16	258	0	547	0	0	0	0	0
	7:15 AM	10	2	31	0	0	18	1	248	19	14	237	1	580	0	0	0	0	0
	7:30 AM	18	5	46	0	0	20	2	231	16	28	297	0	662	0	0	0	0	0
	7:45 AM	25	5	49	0	1	33	2	174	12	48	273	5	625	0	0	0	0	0
	8:00 AM	10	4	21	0	1	21	2	197	10	29	334	0	627	0	0	0	0	0
	8:15 AM	7	10	15	0	1	24	2	180	10	17	226	2	492	0	0	0	0	0
	8:30 AM	14	9	14	4	1	31	5	204	6	21	222	6	537	0	0	0	0	0
	8:45 AM	17	7	7	2	0	29	3	171	7	10	221	9	481	0	0	0	0	0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	114	46	205	6	4	186	17	1,623	81	182	2,066	23	4,551	0	0	0	0	0
	APPROACH %	31%	13%	56%	3%	2%	95%	1%	94%	5%	8%	91%	1%						
	APP/DEPART	365	/	85	196	/	266	1,720	/	1,834	2,270	/	2,366	0					
BEGIN PEAK HR	7:15 AM																		
VOLUMES	63	16	146	0	2	92	7	849	56	118	1,140	6	2,494						
APPROACH %	28%	7%	65%	0%	2%	98%	1%	93%	6%	9%	90%	0%							
PEAK HR FACTOR	0.720			0.691			0.852			0.873			0.942						
APP/DEPART	225	/	29	94	/	176	912	/	995	1,264	/	1,294	0						
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:00 PM	5	1	22	1	2	4	3	248	6	22	163	3	479	0	0	0	0	
	4:15 PM	14	0	37	4	0	0	5	278	7	31	195	0	567	0	0	0	0	
	4:30 PM	7	8	34	6	0	6	7	292	13	17	195	4	587	0	0	0	0	
	4:45 PM	8	4	33	4	3	5	4	273	6	18	232	3	591	0	0	0	0	
	5:00 PM	5	2	23	6	1	18	5	337	9	19	249	5	678	0	0	0	0	
	5:15 PM	9	2	36	7	0	11	3	276	5	24	184	16	573	0	0	0	0	
	5:30 PM	5	8	24	6	1	18	4	297	11	27	275	2	677	0	0	0	0	
	5:45 PM	4	4	26	2	1	13	2	270	3	28	181	12	545	0	0	0	0	
	VOLUMES	57	29	233	35	8	75	32	2,268	60	183	1,672	45	4,695	0	0	0	0	
	APPROACH %	18%	9%	73%	30%	7%	63%	1%	96%	3%	10%	88%	2%						
	APP/DEPART	318	/	106	118	/	251	2,360	/	2,536	1,900	/	1,803	0					
BEGIN PEAK HR	4:45 PM																		
VOLUMES	27	16	115	23	5	52	16	1,182	31	87	940	26	2,518						
APPROACH %	17%	10%	73%	28%	6%	65%	1%	96%	3%	8%	89%	2%							
PEAK HR FACTOR	0.838			0.795			0.876			0.868			0.929						
APP/DEPART	158	/	58	80	/	123	1,229	/	1,319	1,052	/	1,019	0						



City of Menifee
 N/S: Sherman Road
 E/W: SR-74
 Weather: Clear

File Name : 13_MEN_Sherman_74 AM
 Site Code : 06719115
 Start Date : 2/20/2019
 Page No : 1

Groups Printed- Total Volume

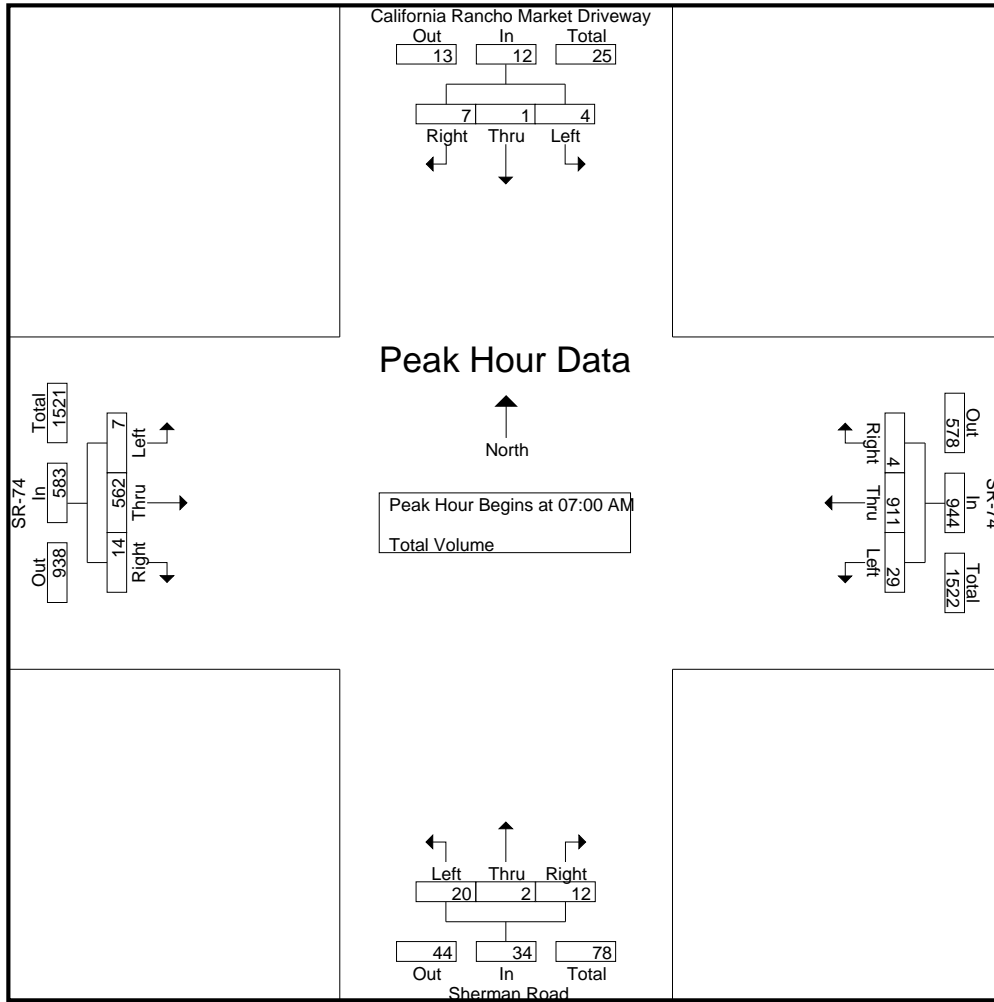
Start Time	California Rancho Market Driveway Southbound				SR-74 Westbound				Sherman Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	1	0	1	2	3	215	0	218	2	0	3	5	1	160	2	163	388
07:15 AM	0	0	1	1	6	250	0	256	6	1	3	10	2	111	2	115	382
07:30 AM	2	1	3	6	10	235	2	247	7	0	2	9	1	145	3	149	411
07:45 AM	1	0	2	3	10	211	2	223	5	1	4	10	3	146	7	156	392
Total	4	1	7	12	29	911	4	944	20	2	12	34	7	562	14	583	1573
08:00 AM	0	1	3	4	6	194	1	201	11	0	6	17	3	122	4	129	351
08:15 AM	1	0	1	2	9	186	2	197	10	0	1	11	4	140	7	151	361
08:30 AM	1	0	0	1	8	195	0	203	8	0	3	11	2	154	4	160	375
08:45 AM	0	0	4	4	8	185	1	194	17	0	2	19	5	119	1	125	342
Total	2	1	8	11	31	760	4	795	46	0	12	58	14	535	16	565	1429
Grand Total	6	2	15	23	60	1671	8	1739	66	2	24	92	21	1097	30	1148	3002
Apprch %	26.1	8.7	65.2		3.5	96.1	0.5		71.7	2.2	26.1		1.8	95.6	2.6		
Total %	0.2	0.1	0.5	0.8	2	55.7	0.3	57.9	2.2	0.1	0.8	3.1	0.7	36.5	1	38.2	

Start Time	California Rancho Market Driveway Southbound				SR-74 Westbound				Sherman Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	1	0	1	2	3	215	0	218	2	0	3	5	1	160	2	163	388
07:15 AM	0	0	1	1	6	250	0	256	6	1	3	10	2	111	2	115	382
07:30 AM	2	1	3	6	10	235	2	247	7	0	2	9	1	145	3	149	411
07:45 AM	1	0	2	3	10	211	2	223	5	1	4	10	3	146	7	156	392
Total Volume	4	1	7	12	29	911	4	944	20	2	12	34	7	562	14	583	1573
% App. Total	33.3	8.3	58.3		3.1	96.5	0.4		58.8	5.9	35.3		1.2	96.4	2.4		
PHF	.500	.250	.583	.500	.725	.911	.500	.922	.714	.500	.750	.850	.583	.878	.500	.894	.957

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

City of Menifee
 N/S: Sherman Road
 E/W: SR-74
 Weather: Clear

File Name : 13_MEN_Sherman_74 AM
 Site Code : 06719115
 Start Date : 2/20/2019
 Page No : 2



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

	07:30 AM				07:00 AM				08:00 AM				07:45 AM			
+0 mins.	2	1	3	6	3	215	0	218	11	0	6	17	3	146	7	156
+15 mins.	1	0	2	3	6	250	0	256	10	0	1	11	3	122	4	129
+30 mins.	0	1	3	4	10	235	2	247	8	0	3	11	4	140	7	151
+45 mins.	1	0	1	2	10	211	2	223	17	0	2	19	2	154	4	160
Total Volume	4	2	9	15	29	911	4	944	46	0	12	58	12	562	22	596
% App. Total	26.7	13.3	60		3.1	96.5	0.4		79.3	0	20.7		2	94.3	3.7	
PHF	.500	.500	.750	.625	.725	.911	.500	.922	.676	.000	.500	.763	.750	.912	.786	.931

City of Menifee
 N/S: Sherman Road
 E/W: SR-74
 Weather: Clear

File Name : 13_MEN_Sherman_74 PM
 Site Code : 06719115
 Start Date : 2/20/2019
 Page No : 1

Groups Printed- Total Volume

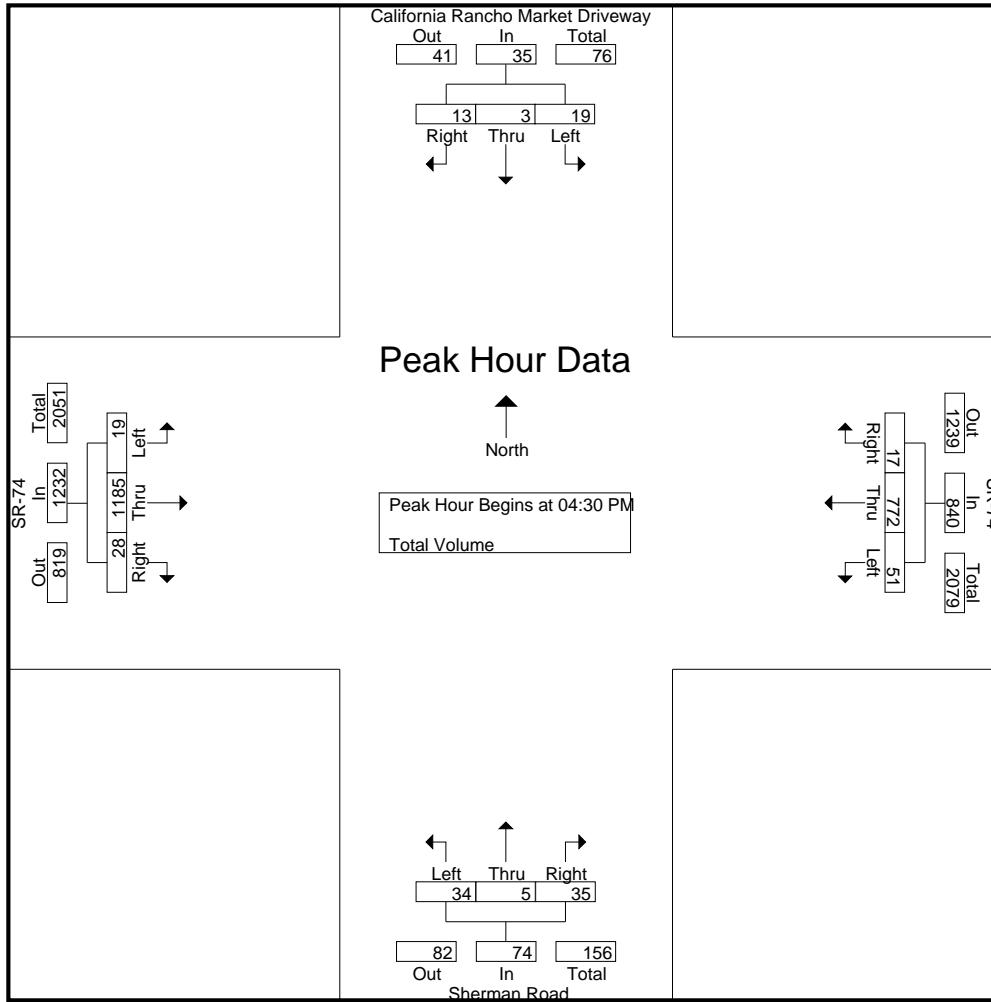
Start Time	California Rancho Market Driveway Southbound				SR-74 Westbound				Sherman Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	2	2	2	6	12	190	3	205	7	1	12	20	3	289	8	300	531
04:15 PM	3	1	5	9	11	193	3	207	13	0	7	20	7	228	9	244	480
04:30 PM	4	0	3	7	11	198	7	216	11	0	12	23	7	308	6	321	567
04:45 PM	5	1	1	7	11	193	2	206	4	1	10	15	7	286	6	299	527
Total	14	4	11	29	45	774	15	834	35	2	41	78	24	1111	29	1164	2105
05:00 PM	5	0	7	12	13	176	5	194	10	2	5	17	3	306	6	315	538
05:15 PM	5	2	2	9	16	205	3	224	9	2	8	19	2	285	10	297	549
05:30 PM	5	0	2	7	8	184	4	196	9	2	7	18	8	311	7	326	547
05:45 PM	2	2	6	10	4	157	2	163	10	1	8	19	4	255	11	270	462
Total	17	4	17	38	41	722	14	777	38	7	28	73	17	1157	34	1208	2096
Grand Total	31	8	28	67	86	1496	29	1611	73	9	69	151	41	2268	63	2372	4201
Apprch %	46.3	11.9	41.8		5.3	92.9	1.8		48.3	6	45.7		1.7	95.6	2.7		
Total %	0.7	0.2	0.7	1.6	2	35.6	0.7	38.3	1.7	0.2	1.6	3.6	1	54	1.5	56.5	

Start Time	California Rancho Market Driveway Southbound				SR-74 Westbound				Sherman Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	4	0	3	7	11	198	7	216	11	0	12	23	7	308	6	321	567
04:45 PM	5	1	1	7	11	193	2	206	4	1	10	15	7	286	6	299	527
05:00 PM	5	0	7	12	13	176	5	194	10	2	5	17	3	306	6	315	538
05:15 PM	5	2	2	9	16	205	3	224	9	2	8	19	2	285	10	297	549
Total Volume	19	3	13	35	51	772	17	840	34	5	35	74	19	1185	28	1232	2181
% App. Total	54.3	8.6	37.1		6.1	91.9	2		45.9	6.8	47.3		1.5	96.2	2.3		
PHF	.950	.375	.464	.729	.797	.941	.607	.938	.773	.625	.729	.804	.679	.962	.700	.960	.962

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:30 PM

City of Menifee
 N/S: Sherman Road
 E/W: SR-74
 Weather: Clear

File Name : 13_MEN_Sherman_74 PM
 Site Code : 06719115
 Start Date : 2/20/2019
 Page No : 2



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

	05:00 PM				04:30 PM				04:00 PM				04:45 PM			
+0 mins.	5	0	7	12	11	198	7	216	7	1	12	20	7	286	6	299
+15 mins.	5	2	2	9	11	193	2	206	13	0	7	20	3	306	6	315
+30 mins.	5	0	2	7	13	176	5	194	11	0	12	23	2	285	10	297
+45 mins.	2	2	6	10	16	205	3	224	4	1	10	15	8	311	7	326
Total Volume	17	4	17	38	51	772	17	840	35	2	41	78	20	1188	29	1237
% App. Total	44.7	10.5	44.7		6.1	91.9	2		44.9	2.6	52.6		1.6	96	2.3	
PHF	.850	.500	.607	.792	.797	.941	.607	.938	.673	.500	.854	.848	.625	.955	.725	.949

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: 1/22/19 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Menifee Murrieta Ethanac	PROJECT #: SC2048	LOCATION #: 7	CONTROL: SIGNAL																																																																				
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td rowspan="2" style="width: 10%;">PCE</td> <td colspan="10">NOTES:</td> <td style="width: 5%; text-align: center;">AM</td> <td style="width: 5%; text-align: center;">▲</td> <td style="width: 5%;"></td> </tr> <tr> <td style="width: 10%;">Class</td> <td style="width: 10%; text-align: center;">1</td> <td style="width: 10%; text-align: center;">2</td> <td style="width: 10%; text-align: center;">3</td> <td style="width: 10%; text-align: center;">4</td> <td style="width: 10%; text-align: center;">5</td> <td style="width: 10%; text-align: center;">6</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 5%; text-align: center;">PM</td> <td style="width: 5%; text-align: center;">◀</td> <td style="width: 5%; text-align: center;">W</td> </tr> <tr> <td rowspan="2" style="width: 10%;">Adjusted</td> <td>Factor</td> <td style="text-align: center;">1</td> <td style="text-align: center;">1.5</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 5%; text-align: center;">MD</td> <td style="width: 5%; text-align: center;">▶</td> <td style="width: 5%; text-align: center;">E</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="width: 5%; text-align: center;">OTHER</td> <td style="width: 5%; text-align: center;">S</td> <td style="width: 5%;"></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="width: 5%; text-align: center;">OTHER</td> <td style="width: 5%; text-align: center;">▼</td> <td style="width: 5%;"></td> </tr> </table>						PCE	NOTES:										AM	▲		Class	1	2	3	4	5	6				PM	◀	W	Adjusted	Factor	1	1.5	2	3	2	2				MD	▶	E											OTHER	S													OTHER	▼	
PCE	NOTES:										AM	▲																																																													
	Class	1	2	3	4	5	6				PM	◀	W																																																												
Adjusted	Factor	1	1.5	2	3	2	2				MD	▶	E																																																												
											OTHER	S																																																													
											OTHER	▼																																																													

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			U-TURNS				
	NL 0.3	NT 0.3	NR 0.3	SL 0	ST 1	SR 1	EL 1	ET 2	ER 0	WL 1	WT 2	WR 1	TOTAL	NB	SB	EB	WB

AM	7:00 AM	32	41	59	5	5	0	3	167	18	21	66	66	481					0		
	7:15 AM	31	43	38	2	9	1	3	143	18	25	101	99	511					0		
	7:30 AM	37	70	26	3	17	1	1	149	21	22	126	125	595					0		
	7:45 AM	85	35	23	9	13	11	3	115	21	35	203	40	591					0		
	8:00 AM	78	28	53	0	14	6	0	84	19	32	142	20	475					0		
	8:15 AM	25	28	45	3	18	1	0	141	14	35	111	6	424					0		
	8:30 AM	18	20	46	7	17	0	0	85	11	29	85	4	319					0		
	8:45 AM	14	14	41	3	17	1	3	69	18	29	68	6	280					0		
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0		
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0		
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0		
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0		
	VOLUMES	318	277	330	31	107	21	12	951	139	226	900	365	3,674	0	0	0	0	0		
	APPROACH %	34%	30%	36%	19%	68%	13%	1%	86%	13%	15%	60%	24%								
	APP/DEPART	924	/	654	158	/	472	1,102	/	1,311	1,490	/	1,238	0							
BEGIN PEAK HR	7:00 AM																				
VOLUMES	184	188	145	19	43	13	10	574	78	102	495	330	2,177								
APPROACH %	36%	36%	28%	25%	57%	18%	1%	87%	12%	11%	53%	36%									
PEAK HR FACTOR	0.909													0.569	0.878	0.834	0.915				
APP/DEPART	517	/	528	74	/	222	661	/	737	926	/	691	0								
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0		
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0		
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0		
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0		
	4:00 PM	21	20	41	1	20	0	1	92	27	41	95	1	359					0		
	4:15 PM	17	30	50	8	28	2	0	78	37	64	97	3	411					0		
	4:30 PM	26	18	43	1	36	3	1	89	24	44	104	0	386					0		
	4:45 PM	31	24	43	4	28	2	1	61	19	45	107	4	367					0		
	5:00 PM	19	16	41	5	33	1	0	96	23	75	99	1	408					0		
	5:15 PM	31	18	37	2	29	2	0	80	36	60	105	5	401					0		
	5:30 PM	40	22	45	3	19	1	0	85	19	62	91	6	391					0		
	5:45 PM	22	16	27	1	30	3	1	55	30	57	104	2	347					0		
	VOLUMES	205	161	325	25	221	14	4	635	214	446	799	21	3,069	0	0	0	0	0		
	APPROACH %	30%	23%	47%	9%	85%	5%	0%	74%	25%	35%	63%	2%								
	APP/DEPART	691	/	186	260	/	881	852	/	984	1,266	/	1,018	0							
BEGIN PEAK HR	4:15 PM																				
VOLUMES	92	87	177	18	124	8	2	323	103	227	405	8	1,572								
APPROACH %	26%	24%	50%	12%	83%	5%	0%	76%	24%	35%	63%	1%									
PEAK HR FACTOR	0.915													0.946	0.898	0.916	0.956				
APP/DEPART	355	/	96	150	/	454	428	/	517	640	/	505	0								



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
1/22/19
TUESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

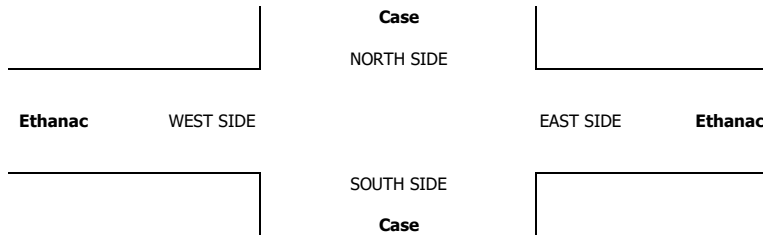
Menifee
Case
Ethanac

PROJECT #: SC2048
LOCATION #: 9
CONTROL: SIGNAL

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			SOUTHBOUND			EASTBOUND			WESTBOUND			U-TURNS				
	NL X	NT X	NR X	SL 2	ST X	SR 2	EL 1	ET 2	ER X	WL X	WT 2	WR 1	TOTAL	NB	SB	EB	WB

AM	7:00 AM	0	0	0	65	0	18	28	234	0	0	175	91	610					0
	7:15 AM	0	0	0	89	0	27	26	178	0	0	202	67	588					0
	7:30 AM	0	0	0	76	0	39	25	177	0	0	251	93	660					0
	7:45 AM	0	0	0	81	0	34	31	111	0	0	243	103	602					0
	8:00 AM	0	0	0	66	0	30	44	98	0	0	163	114	514					0
	8:15 AM	0	0	0	85	0	30	52	150	0	0	104	109	529					0
	8:30 AM	0	0	0	102	0	27	43	99	0	0	96	107	473					0
	8:45 AM	0	0	0	92	0	27	31	99	0	0	83	106	437					0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	
VOLUMES	0	0	0	655	0	232	278	1,144	0	0	1,315	788	4,410	0	0	0	0	0	
APPROACH %	0%	0%	0%	74%	0%	26%	20%	80%	0%	0%	63%	37%							
APP/DEPART	0	/	1,066	886	/	0	1,422	/	1,799	2,102	/	1,546	0						
BEGIN PEAK HR	7:00 AM																		
VOLUMES	0	0	0	310	0	118	109	700	0	0	870	352	2,459						
APPROACH %	0%	0%	0%	72%	0%	28%	13%	87%	0%	0%	71%	29%							
PEAK HR FACTOR	0.000				0.926			0.771			0.886		0.931						
APP/DEPART	0	/	461	428	/	0	809	/	1,010	1,222	/	988	0						
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:00 PM	0	0	0	135	0	34	34	109	0	0	106	129	547					0
	4:15 PM	0	0	0	113	0	34	37	98	0	0	135	121	537					0
	4:30 PM	0	0	0	134	0	38	46	110	0	0	91	113	531					0
	4:45 PM	0	0	0	113	0	39	32	88	0	0	129	115	515					0
	5:00 PM	0	0	0	118	0	36	42	100	0	0	114	101	510					0
	5:15 PM	0	0	0	100	0	44	40	99	0	0	123	125	528					0
5:30 PM	0	0	0	120	0	37	44	101	0	0	102	97	500					0	
5:45 PM	0	0	0	123	0	37	28	69	0	0	107	100	463					0	
VOLUMES	0	0	0	955	0	298	302	772	0	0	905	900	4,129	0	0	0	0	0	
APPROACH %	0%	0%	0%	76%	0%	24%	28%	72%	0%	0%	50%	50%							
APP/DEPART	0	/	1,201	1,252	/	0	1,073	/	1,726	1,804	/	1,202	0						
BEGIN PEAK HR	4:00 PM																		
VOLUMES	0	0	0	494	0	145	148	405	0	0	461	478	2,130						
APPROACH %	0%	0%	0%	77%	0%	23%	27%	73%	0%	0%	49%	51%							
PEAK HR FACTOR	0.000				0.931			0.888			0.918		0.974						
APP/DEPART	0	/	626	639	/	0	553	/	899	939	/	605	0						



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
6/6/18
WEDNESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

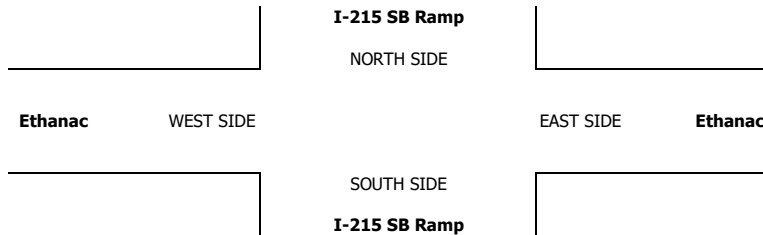
Menifee
I-215 SB Ramp
Ethanac

PROJECT #: SC1797
LOCATION #: 1
CONTROL: SIGNAL

PCE Adjusted	NOTES:										AM	▲ N	E ▶
	Class	1	2	3	4	5	6	PM	◀ W	S			
	Factor	1	1.5	2	3	2	2	MD			OTHER		
										OTHER	▼		

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL	U-TURNS				
	NL X	NT X	NR X	SL 0.5	ST 0.5	SR 1	EL X	ET 1	ER 1	WL 1	WT 2	WR X		NB	SB	EB	WB	TTL

AM	7:00 AM	0	0	0	29	2	49	0	155	98	21	102	0	455						0
	7:15 AM	0	0	0	22	1	43	0	152	109	32	128	0	486						0
	7:30 AM	0	0	0	17	0	50	0	133	108	24	162	0	492						0
	7:45 AM	0	0	0	39	0	56	0	149	100	30	154	0	527						0
	8:00 AM	0	0	0	25	0	52	0	155	86	27	176	0	520						0
	8:15 AM	0	0	0	29	2	55	0	142	93	26	126	0	472						0
	8:30 AM	0	0	0	30	0	66	0	138	93	28	116	0	469						0
	8:45 AM	0	0	0	29	1	51	0	95	97	25	152	0	449						0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0						0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0						0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0						0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0						0
	VOLUMES	0	0	0	220	6	420	0	1,118	782	211	1,113	0	3,868	0	0	0	0	0	0
APPROACH %	0%	0%	0%	34%	1%	65%	0%	59%	41%	16%	84%	0%								
APP/DEPART	0	/	0	645	/	998	1,900	/	1,338	1,324	/	1,533	0							
BEGIN PEAK HR	7:15 AM																			
VOLUMES	0	0	0	103	1	200	0	589	402	112	619	0	2,025							
APPROACH %	0%	0%	0%	34%	0%	66%	0%	59%	41%	15%	85%	0%								
PEAK HR FACTOR	0.000			0.803			0.949			0.904			0.960							
APP/DEPART	0	/	0	304	/	515	991	/	692	731	/	818	0							
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0						0	
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0						0	
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0						0	
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0						0	
	4:00 PM	0	0	0	34	0	75	0	139	88	22	159	0	516						0
	4:15 PM	0	0	0	33	0	70	0	120	101	35	175	0	533						0
	4:30 PM	0	0	0	23	2	65	0	145	87	27	152	0	500						0
	4:45 PM	0	0	0	23	0	71	0	121	98	26	157	0	494						0
	5:00 PM	0	0	0	29	1	68	0	112	85	21	147	0	462						0
	5:15 PM	0	0	0	29	0	69	0	137	85	21	139	0	478						0
	5:30 PM	0	0	0	33	0	80	0	109	77	21	150	0	470						0
	5:45 PM	0	0	0	30	1	87	0	118	65	17	138	0	455						0
	VOLUMES	0	0	0	231	4	584	0	1,000	685	189	1,215	0	3,907	0	0	0	0	0	0
APPROACH %	0%	0%	0%	28%	0%	71%	0%	59%	41%	13%	87%	0%								
APP/DEPART	0	/	0	819	/	878	1,685	/	1,231	1,404	/	1,799	0							
BEGIN PEAK HR	4:00 PM																			
VOLUMES	0	0	0	112	2	281	0	525	374	109	642	0	2,043							
APPROACH %	0%	0%	0%	28%	1%	71%	0%	58%	42%	15%	85%	0%								
PEAK HR FACTOR	0.000			0.908			0.970			0.896			0.958							
APP/DEPART	0	/	0	394	/	485	898	/	636	751	/	922	0							



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
6/6/18
WEDNESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

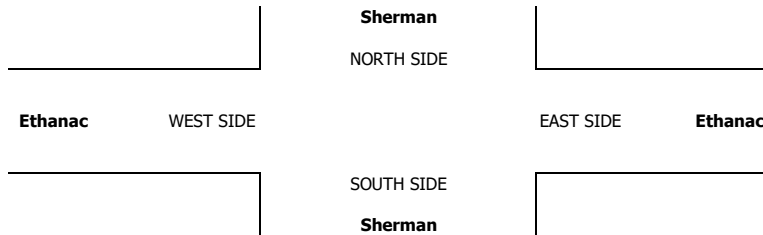
Menifee
Sherman
Ethanac

PROJECT #: SC1797
LOCATION #: 4
CONTROL: STOP N/S

PCE Adjusted	NOTES:										AM PM MD OTHER OTHER	▲ N ◀ W S ▼	E ▶
	Class	1	2	3	4	5	6	7	8	9			
	Factor	1	1.5	2	3	2	2	2	2	2			

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

AM	7:00 AM	1	0	0	0	0	16	18	97	2	0	57	0	191					0			
	7:15 AM	6	0	0	1	1	26	27	102	0	0	72	1	235					0			
	7:30 AM	0	1	1	0	0	26	26	91	2	2	84	1	233					0			
	7:45 AM	0	2	0	0	1	35	19	84	5	4	113	0	262					0			
	8:00 AM	0	0	1	3	1	17	26	64	6	2	85	1	205					0			
	8:15 AM	1	3	0	0	0	21	33	73	2	0	42	0	173					0			
	8:30 AM	7	0	0	0	0	29	23	50	4	0	32	0	143					0			
	8:45 AM	3	1	2	2	1	23	13	55	0	0	41	0	140					0			
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0			
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0			
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0			
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0			
	VOLUMES	17	7	4	6	4	190	184	614	20	8	525	3	1,580	0	0	0	0	0			
APPROACH %	63%	24%	13%	3%	2%	95%	22%	75%	2%	1%	98%	1%										
APP/DEPART	27	/	193	200	/	32	817	/	623	536	/	732	0									
BEGIN PEAK HR	7:15 AM																					
VOLUMES	6	3	2	4	3	102	97	340	13	8	354	3	935									
APPROACH %	55%	27%	18%	4%	3%	94%	22%	76%	3%	2%	97%	1%										
PEAK HR FACTOR	0.458													0.768	0.875	0.782	0.892					
APP/DEPART	11	/	103	109	/	24	450	/	346	365	/	462	0									
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0					0				
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0					0				
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0					0				
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0					0				
	4:00 PM	1	0	1	0	1	17	42	74	3	3	49	1	190					0			
	4:15 PM	5	3	2	1	2	40	28	93	0	0	52	0	225					0			
	4:30 PM	3	1	1	1	2	12	41	98	1	2	68	0	228					0			
	4:45 PM	10	2	0	1	1	17	37	78	0	5	63	1	214					0			
	5:00 PM	1	2	2	0	0	23	34	81	2	2	48	0	193					0			
	5:15 PM	4	0	2	0	1	26	33	81	0	1	55	1	203					0			
	5:30 PM	0	1	2	0	0	25	30	84	1	0	51	0	193					0			
	5:45 PM	1	0	0	0	4	26	32	76	1	0	37	3	178					0			
	VOLUMES	25	9	10	3	10	184	275	663	8	12	421	6	1,623	0	0	0	0	0			
APPROACH %	58%	20%	22%	2%	5%	93%	29%	70%	1%	3%	96%	1%										
APP/DEPART	43	/	289	197	/	30	945	/	675	439	/	629	0									
BEGIN PEAK HR	4:15 PM																					
VOLUMES	19	8	5	3	5	90	139	349	3	9	230	1	859									
APPROACH %	61%	24%	15%	3%	5%	92%	28%	71%	1%	4%	96%	0%										
PEAK HR FACTOR	0.646													0.574	0.883	0.855	0.942					
APP/DEPART	31	/	148	98	/	16	491	/	357	240	/	339	0									



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: 6/6/18 WEDNESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Menifee Dawson Ethanac	PROJECT #: LOCATION #: CONTROL:	SC1797 5 SIGNAL
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PCE Adjusted	NOTES:										AM PM MD OTHER OTHER	▲ N ◀ W S ▼	E ▶
	Class	1	2	3	4	5	6	7	8	9			
	Factor	1	1.5	2	3	2	2						

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			U-TURNS				
	NL 0	NT X	NR 0	SL X	ST X	SR X	EL X	ET 1	ER 0	WL 0	WT 1	WR X	TOTAL	NB	SB	EB	WB

AM	7:00 AM	0	0	1	0	0	0	0	106	0	2	62	0	171					0
	7:15 AM	0	0	1	0	0	0	0	105	1	0	68	0	175					0
	7:30 AM	0	0	0	0	0	0	0	85	0	0	96	0	181					0
	7:45 AM	0	0	0	0	0	0	0	82	0	1	107	0	189					0
	8:00 AM	1	0	0	0	0	0	0	66	0	0	70	0	136					0
	8:15 AM	0	0	0	0	0	0	0	65	0	0	39	0	104					0
	8:30 AM	0	0	0	0	0	0	0	56	0	0	32	0	88					0
	8:45 AM	0	0	0	0	0	0	0	46	0	0	44	0	90					0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	VOLUMES	1	0	2	0	0	0	0	610	1	3	516	0	1,132	0	0	0	0	0
APPROACH %	33%	0%	67%	0%	0%	0%	0%	100%	0%	1%	99%	0%							
APP/DEPART	3	/	0	0	/	4	611	/	612	519	/	517	0						
BEGIN PEAK HR	7:00 AM																		
VOLUMES	0	0	2	0	0	0	0	377	1	3	332	0	715						
APPROACH %	0%	0%	100%	0%	0%	0%	0%	100%	0%	1%	99%	0%							
PEAK HR FACTOR	0.500			0.000			0.892			0.779			0.946						
APP/DEPART	2	/	0	0	/	4	378	/	379	335	/	332	0						
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:00 PM	0	0	0	0	0	0	0	87	2	1	58	0	147					0
	4:15 PM	0	0	0	0	0	0	0	93	0	0	58	0	151					0
	4:30 PM	0	0	1	0	0	0	0	89	0	2	77	0	169					0
	4:45 PM	0	0	0	0	0	0	0	83	0	0	47	0	130					0
	5:00 PM	0	0	2	0	0	0	0	66	0	0	53	0	120					0
	5:15 PM	0	0	0	0	0	0	2	78	1	2	51	0	133					0
	5:30 PM	1	0	0	0	0	0	0	84	0	0	46	0	131					0
	5:45 PM	1	0	0	0	0	0	0	76	0	0	35	0	112					0
	VOLUMES	2	0	3	0	0	0	2	654	3	5	424	0	1,091	0	0	0	0	0
APPROACH %	44%	0%	56%	0%	0%	0%	0%	99%	0%	1%	99%	0%							
APP/DEPART	5	/	2	0	/	8	658	/	656	429	/	426	0						
BEGIN PEAK HR	4:00 PM																		
VOLUMES	0	0	1	0	0	0	0	351	2	3	240	0	596						
APPROACH %	0%	0%	100%	0%	0%	0%	0%	100%	0%	1%	99%	0%							
PEAK HR FACTOR	0.250			0.000			0.951			0.769			0.884						
APP/DEPART	1	/	0	0	/	5	352	/	352	243	/	240	0						



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
1/22/19
TUESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

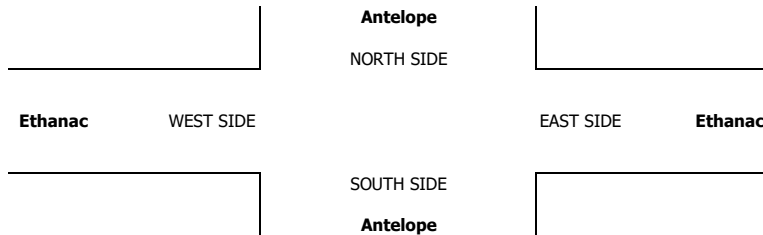
Menifee
Antelope
Ethanac

PROJECT #: SC2048
LOCATION #: 16
CONTROL: STOP N/S

PCE Adjusted	NOTES:										AM PM MD OTHER OTHER	▲ N ◀ W S ▼	E ▶
	Class	1	2	3	4	5	6	7	8	9			
	Factor	1	1.5	2	3	2	2						

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL	U-TURNS				
	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 1	ER 1	WL 0	WT 1	WR 0		NB	SB	EB	WB	TTL

AM													TOTAL						
	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 1	ER 1	WL 0	WT 1	WR 0		NB	SB	EB	WB	TTL	
7:00 AM	2	0	1	7	1	0	1	125	2	1	63	1	203					0	
7:15 AM	4	0	0	5	0	0	0	118	3	0	77	5	212					0	
7:30 AM	4	0	1	3	0	0	0	92	3	0	87	10	199					0	
7:45 AM	0	0	0	0	0	0	0	65	0	1	121	10	196					0	
8:00 AM	0	0	0	0	0	0	0	46	1	0	71	7	124					0	
8:15 AM	2	0	0	2	0	0	0	45	5	0	52	2	106					0	
8:30 AM	4	0	2	0	0	1	0	50	2	3	38	9	109					0	
8:45 AM	1	0	0	5	0	0	0	38	7	1	52	12	115					0	
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0	
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0	
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0	
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0	
VOLUMES	15	0	4	22	1	1	1	577	22	6	560	56	1,263	0	0	0	0	0	
APPROACH %	79%	0%	21%	91%	4%	4%	0%	96%	4%	1%	90%	9%							
APP/DEPART	19	/	57	24	/	29	600	/	602	621	/	576	0						
BEGIN PEAK HR	7:00 AM																		
VOLUMES	9	0	2	15	1	0	1	399	8	2	348	26	810						
APPROACH %	81%	0%	19%	94%	6%	0%	0%	98%	2%	1%	93%	7%							
PEAK HR FACTOR	0.583			0.500			0.799			0.714			0.957						
APP/DEPART	11	/	27	16	/	11	408	/	416	376	/	356	0						
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0	
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0	
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0	
4:00 PM	5	0	2	4	0	0	0	74	6	0	50	2	143					0	
4:15 PM	3	0	2	1	0	0	0	75	5	1	53	2	141					0	
4:30 PM	11	0	0	6	0	0	0	95	0	1	54	3	169					0	
4:45 PM	6	0	3	1	0	0	1	75	4	3	48	2	141					0	
5:00 PM	10	0	3	6	0	0	0	67	4	0	39	2	130					0	
5:15 PM	7	0	9	1	0	0	0	68	5	3	67	1	160					0	
5:30 PM	15	0	2	2	0	0	0	75	1	1	45	0	141					0	
5:45 PM	4	0	0	0	0	2	0	73	1	0	44	4	128					0	
VOLUMES	60	0	20	21	0	2	1	601	26	9	398	16	1,151	0	0	0	0	0	
APPROACH %	75%	0%	25%	93%	0%	7%	0%	96%	4%	2%	94%	4%							
APP/DEPART	80	/	17	23	/	34	627	/	642	422	/	459	0						
BEGIN PEAK HR	4:30 PM																		
VOLUMES	33	0	15	14	0	0	1	304	13	7	207	8	599						
APPROACH %	69%	0%	31%	100%	0%	0%	0%	96%	4%	3%	94%	3%							
PEAK HR FACTOR	0.758			0.583			0.836			0.782			0.886						
APP/DEPART	47	/	9	14	/	20	318	/	332	221	/	239	0						



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: 1/22/19 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Menifee Briggs SR-74	PROJECT #: SC2048 LOCATION #: 19 CONTROL: SIGNAL															
PCE Adjusted	NOTES:		<table style="margin: auto;"> <tr> <td style="text-align: center;">AM</td> <td style="text-align: center;">▲</td> <td style="text-align: center;">N</td> </tr> <tr> <td style="text-align: center;">PM</td> <td style="text-align: center;">←</td> <td style="text-align: center;">W</td> </tr> <tr> <td style="text-align: center;">MD</td> <td style="text-align: center;">E</td> <td style="text-align: center;">▶</td> </tr> <tr> <td style="text-align: center;">OTHER</td> <td style="text-align: center;">S</td> <td style="text-align: center;">▼</td> </tr> <tr> <td style="text-align: center;">OTHER</td> <td></td> <td></td> </tr> </table>	AM	▲	N	PM	←	W	MD	E	▶	OTHER	S	▼	OTHER		
	AM	▲		N														
PM	←	W																
MD	E	▶																
OTHER	S	▼																
OTHER																		
Class	1	2	3	4	5	6												
Factor	1	1.5	2	3	2	2												

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL	U-TURNS				
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR		NB	SB	EB	WB	TTL

AM	7:00 AM	92	28	18	22	37	20	13	172	135	40	222	26	824					0
	7:15 AM	116	61	25	37	78	26	20	206	166	67	186	28	1,013					0
	7:30 AM	142	77	48	78	64	29	43	122	188	74	263	39	1,164					0
	7:45 AM	125	53	42	85	22	28	30	96	117	55	223	69	943					0
	8:00 AM	57	24	24	76	19	25	24	173	52	26	271	40	807					0
	8:15 AM	39	16	11	58	11	23	17	145	42	11	213	20	604					0
	8:30 AM	33	10	10	27	9	16	10	201	32	8	213	14	581					0
	8:45 AM	28	8	7	20	7	10	10	165	28	10	191	9	491					0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	VOLUMES	630	275	183	402	245	176	166	1,278	759	289	1,781	244	6,425	0	0	0	0	0
APPROACH %	58%	25%	17%	49%	30%	21%	8%	58%	34%	12%	77%	11%							
APP/DEPART	1,088	/	684	822	/	1,293	2,202	/	1,862	2,313	/	2,586	0						
BEGIN PEAK HR	7:00 AM																		
VOLUMES	474	218	132	222	200	103	106	595	605	235	894	162	3,943						
APPROACH %	57%	26%	16%	42%	38%	20%	8%	46%	46%	18%	69%	13%							
PEAK HR FACTOR	0.774													0.847					
APP/DEPART	824	/	485	524	/	1,040	1,306	/	949	1,290	/	1,470	0						
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:00 PM	44	18	18	24	9	10	14	285	49	6	170	13	659					0
	4:15 PM	40	11	14	23	13	9	13	303	39	14	216	21	713					0
	4:30 PM	34	17	19	32	10	13	17	332	47	13	205	19	756					0
	4:45 PM	38	16	20	37	11	18	23	282	56	16	254	19	788					0
	5:00 PM	38	14	13	34	17	31	20	327	50	8	234	13	798					0
	5:15 PM	31	12	11	38	10	25	27	284	31	9	251	19	746					0
	5:30 PM	26	18	9	40	15	20	18	292	38	10	239	27	752					0
	5:45 PM	28	14	7	28	12	22	24	267	51	11	252	20	733					0
	VOLUMES	277	119	110	255	96	148	154	2,371	359	87	1,820	150	5,943	0	0	0	0	0
APPROACH %	55%	23%	22%	51%	19%	30%	5%	82%	12%	4%	88%	7%							
APP/DEPART	505	/	422	498	/	541	2,884	/	2,735	2,057	/	2,245	0						
BEGIN PEAK HR	4:30 PM																		
VOLUMES	140	59	62	141	48	87	86	1,225	183	46	944	70	3,087						
APPROACH %	54%	22%	24%	51%	17%	32%	6%	82%	12%	4%	89%	7%							
PEAK HR FACTOR	0.892													0.968					
APP/DEPART	261	/	214	275	/	276	1,493	/	1,427	1,059	/	1,170	0						



City of Menifee
 N/S: Murrieta Road
 E/W: McLaughlin Road
 Weather: Clear

File Name : 02_MEN_Murrieta_McLaughlin AM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 1

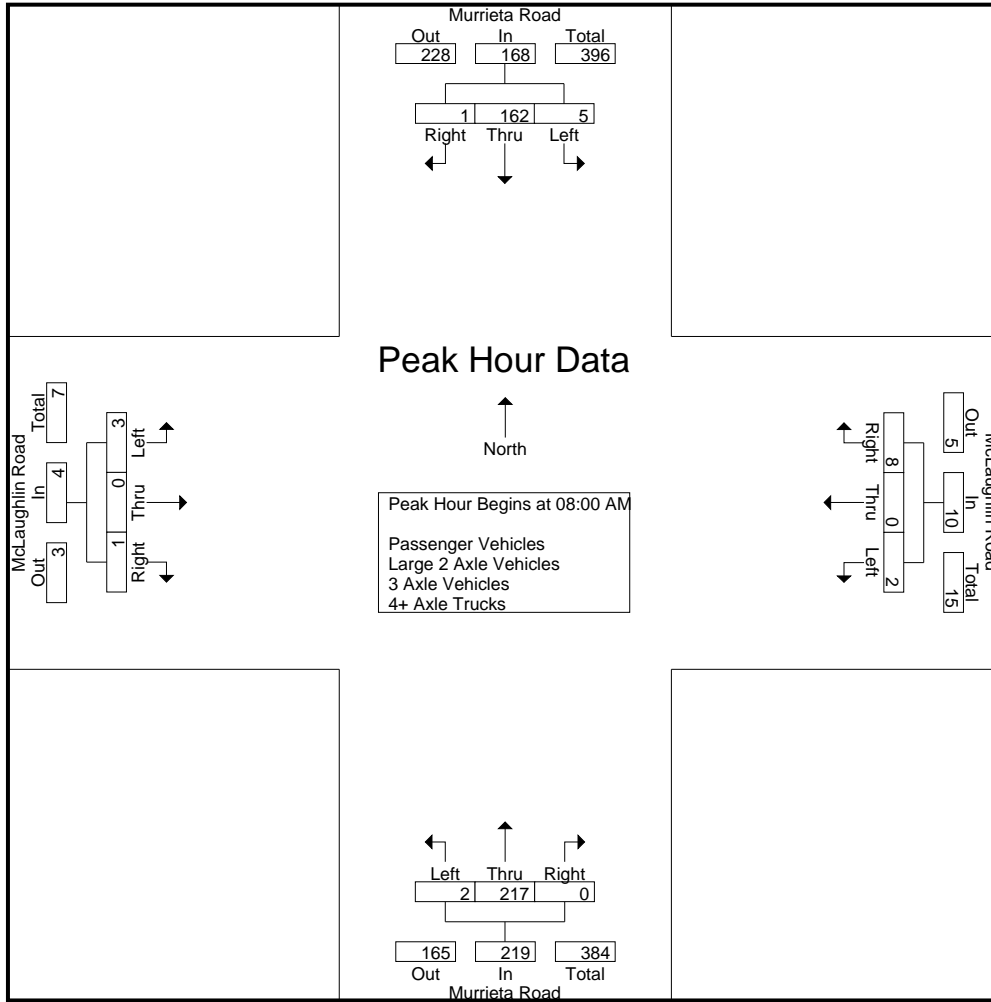
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Murrieta Road Southbound				McLaughlin Road Westbound				Murrieta Road Northbound				McLaughlin Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	23	0	23	0	0	4	4	1	51	0	52	1	0	1	2	81
07:15 AM	0	28	0	28	1	0	7	8	0	38	0	38	0	0	0	0	74
07:30 AM	0	33	0	33	0	0	8	8	0	55	1	56	1	0	1	2	99
07:45 AM	1	43	1	45	1	0	4	5	0	47	0	47	0	0	1	1	98
Total	1	127	1	129	2	0	23	25	1	191	1	193	2	0	3	5	352
08:00 AM	2	32	0	34	0	0	1	1	0	56	0	56	0	0	0	0	91
08:15 AM	1	43	1	45	1	0	3	4	0	50	0	50	1	0	0	1	100
08:30 AM	1	46	0	47	0	0	3	3	1	52	0	53	2	0	1	3	106
08:45 AM	1	41	0	42	1	0	1	2	1	59	0	60	0	0	0	0	104
Total	5	162	1	168	2	0	8	10	2	217	0	219	3	0	1	4	401
Grand Total	6	289	2	297	4	0	31	35	3	408	1	412	5	0	4	9	753
Apprch %	2	97.3	0.7		11.4	0	88.6		0.7	99	0.2		55.6	0	44.4		
Total %	0.8	38.4	0.3	39.4	0.5	0	4.1	4.6	0.4	54.2	0.1	54.7	0.7	0	0.5	1.2	
Passenger Vehicles	5	263	1	269	3	0	29	32	3	389	1	393	4	0	4	8	702
% Passenger Vehicles	83.3	91	50	90.6	75	0	93.5	91.4	100	95.3	100	95.4	80	0	100	88.9	93.2
Large 2 Axle Vehicles	0	16	1	17	1	0	1	2	0	10	0	10	1	0	0	1	30
% Large 2 Axle Vehicles	0	5.5	50	5.7	25	0	3.2	5.7	0	2.5	0	2.4	20	0	0	11.1	4
3 Axle Vehicles	0	9	0	9	0	0	0	0	0	9	0	9	0	0	0	0	18
% 3 Axle Vehicles	0	3.1	0	3	0	0	0	0	0	2.2	0	2.2	0	0	0	0	2.4
4+ Axle Trucks	1	1	0	2	0	0	1	1	0	0	0	0	0	0	0	0	3
% 4+ Axle Trucks	16.7	0.3	0	0.7	0	0	3.2	2.9	0	0	0	0	0	0	0	0	0.4

Start Time	Murrieta Road Southbound				McLaughlin Road Westbound				Murrieta Road Northbound				McLaughlin Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	2	32	0	34	0	0	1	1	0	56	0	56	0	0	0	0	91
08:15 AM	1	43	1	45	1	0	3	4	0	50	0	50	1	0	0	1	100
08:30 AM	1	46	0	47	0	0	3	3	1	52	0	53	2	0	1	3	106
08:45 AM	1	41	0	42	1	0	1	2	1	59	0	60	0	0	0	0	104
Total Volume	5	162	1	168	2	0	8	10	2	217	0	219	3	0	1	4	401
% App. Total	3	96.4	0.6		20	0	80		0.9	99.1	0		75	0	25		
PHF	.625	.880	.250	.894	.500	.000	.667	.625	.500	.919	.000	.913	.375	.000	.250	.333	.946

City of Menifee
 N/S: Murrieta Road
 E/W: McLaughlin Road
 Weather: Clear

File Name : 02_MEN_Murrieta_McLaughlin AM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 2



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

	07:45 AM				07:00 AM				08:00 AM				07:00 AM			
+0 mins.	1	43	1	45	0	0	4	4	0	56	0	56	1	0	1	2
+15 mins.	2	32	0	34	1	0	7	8	0	50	0	50	0	0	0	0
+30 mins.	1	43	1	45	0	0	8	8	1	52	0	53	1	0	1	2
+45 mins.	1	46	0	47	1	0	4	5	1	59	0	60	0	0	1	1
Total Volume	5	164	2	171	2	0	23	25	2	217	0	219	2	0	3	5
% App. Total	2.9	95.9	1.2		8	0	92		0.9	99.1	0		40	0	60	
PHF	.625	.891	.500	.910	.500	.000	.719	.781	.500	.919	.000	.913	.500	.000	.750	.625

City of Menifee
 N/S: Murrieta Road
 E/W: McLaughlin Road
 Weather: Clear

File Name : 02_MEN_Murrieta_McLaughlin AM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	Murrieta Road Southbound				McLaughlin Road Westbound				Murrieta Road Northbound				McLaughlin Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	19	0	19	0	0	4	4	1	50	0	51	1	0	1	2	76
07:15 AM	0	27	0	27	1	0	7	8	0	35	0	35	0	0	0	0	70
07:30 AM	0	30	0	30	0	0	7	7	0	53	1	54	1	0	1	2	93
07:45 AM	1	36	1	38	1	0	4	5	0	46	0	46	0	0	1	1	90
Total	1	112	1	114	2	0	22	24	1	184	1	186	2	0	3	5	329
08:00 AM	1	31	0	32	0	0	1	1	0	53	0	53	0	0	0	0	86
08:15 AM	1	38	0	39	0	0	2	2	0	49	0	49	0	0	0	0	90
08:30 AM	1	44	0	45	0	0	3	3	1	49	0	50	2	0	1	3	101
08:45 AM	1	38	0	39	1	0	1	2	1	54	0	55	0	0	0	0	96
Total	4	151	0	155	1	0	7	8	2	205	0	207	2	0	1	3	373
Grand Total	5	263	1	269	3	0	29	32	3	389	1	393	4	0	4	8	702
Apprch %	1.9	97.8	0.4		9.4	0	90.6		0.8	99	0.3		50	0	50		
Total %	0.7	37.5	0.1	38.3	0.4	0	4.1	4.6	0.4	55.4	0.1	56	0.6	0	0.6	1.1	

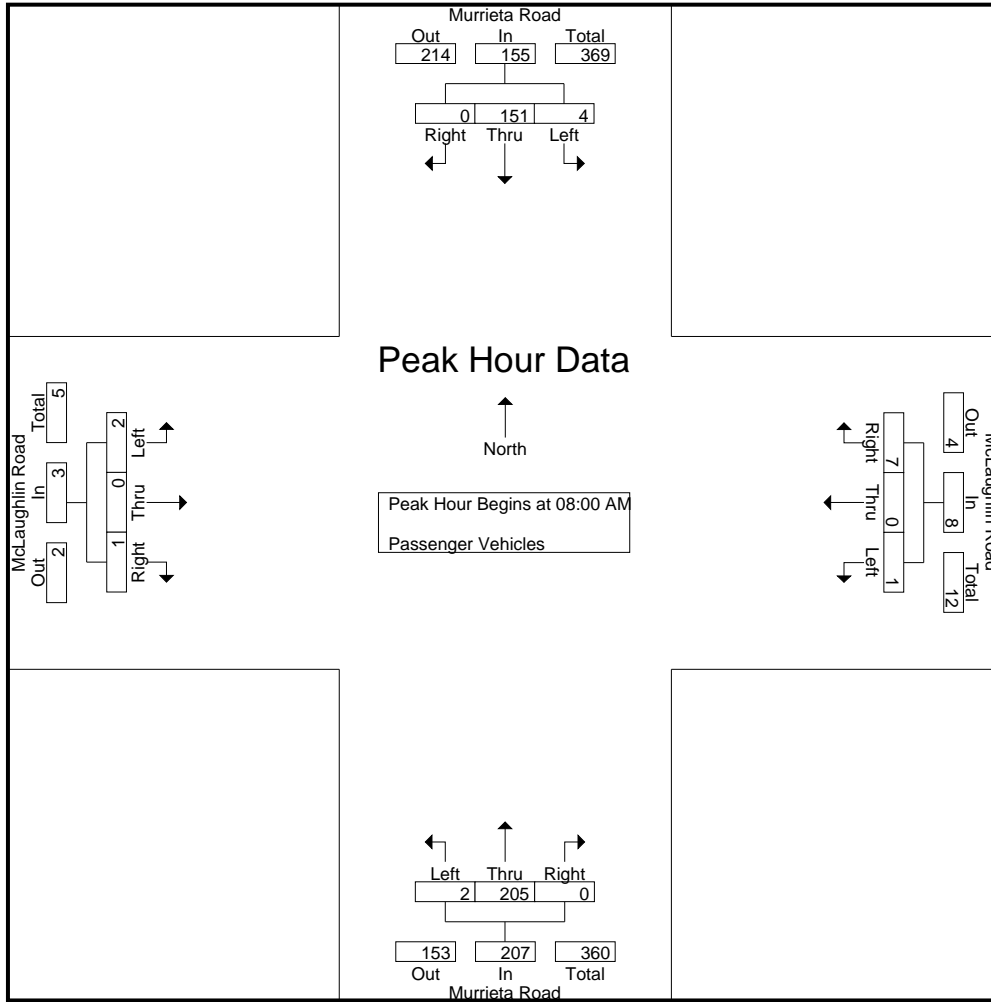
Start Time	Murrieta Road Southbound				McLaughlin Road Westbound				Murrieta Road Northbound				McLaughlin Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
08:00 AM	1	31	0	32	0	0	1	1	0	53	0	53	0	0	0	0	86
08:15 AM	1	38	0	39	0	0	2	2	0	49	0	49	0	0	0	0	90
08:30 AM	1	44	0	45	0	0	3	3	1	49	0	50	2	0	1	3	101
08:45 AM	1	38	0	39	1	0	1	2	1	54	0	55	0	0	0	0	96
Total Volume	4	151	0	155	1	0	7	8	2	205	0	207	2	0	1	3	373
% App. Total	2.6	97.4	0		12.5	0	87.5		1	99	0		66.7	0	33.3		
PHF	1.00	.858	.000	.861	.250	.000	.583	.667	.500	.949	.000	.941	.250	.000	.250	.250	.923

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 08:00 AM

City of Menifee
 N/S: Murrieta Road
 E/W: McLaughlin Road
 Weather: Clear

File Name : 02_MEN_Murrieta_McLaughlin AM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 2



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

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	1	31	0	32	0	0	1	1	0	53	0	53	0	0	0	0
+15 mins.	1	38	0	39	0	0	2	2	0	49	0	49	0	0	0	0
+30 mins.	1	44	0	45	0	0	3	3	1	49	0	50	2	0	1	3
+45 mins.	1	38	0	39	1	0	1	2	1	54	0	55	0	0	0	0
Total Volume	4	151	0	155	1	0	7	8	2	205	0	207	2	0	1	3
% App. Total	2.6	97.4	0		12.5	0	87.5		1	99	0		66.7	0	33.3	
PHF	1.000	.858	.000	.861	.250	.000	.583	.667	.500	.949	.000	.941	.250	.000	.250	.250

City of Menifee
 N/S: Murrieta Road
 E/W: McLaughlin Road
 Weather: Clear

File Name : 02_MEN_Murrieta_McLaughlin AM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

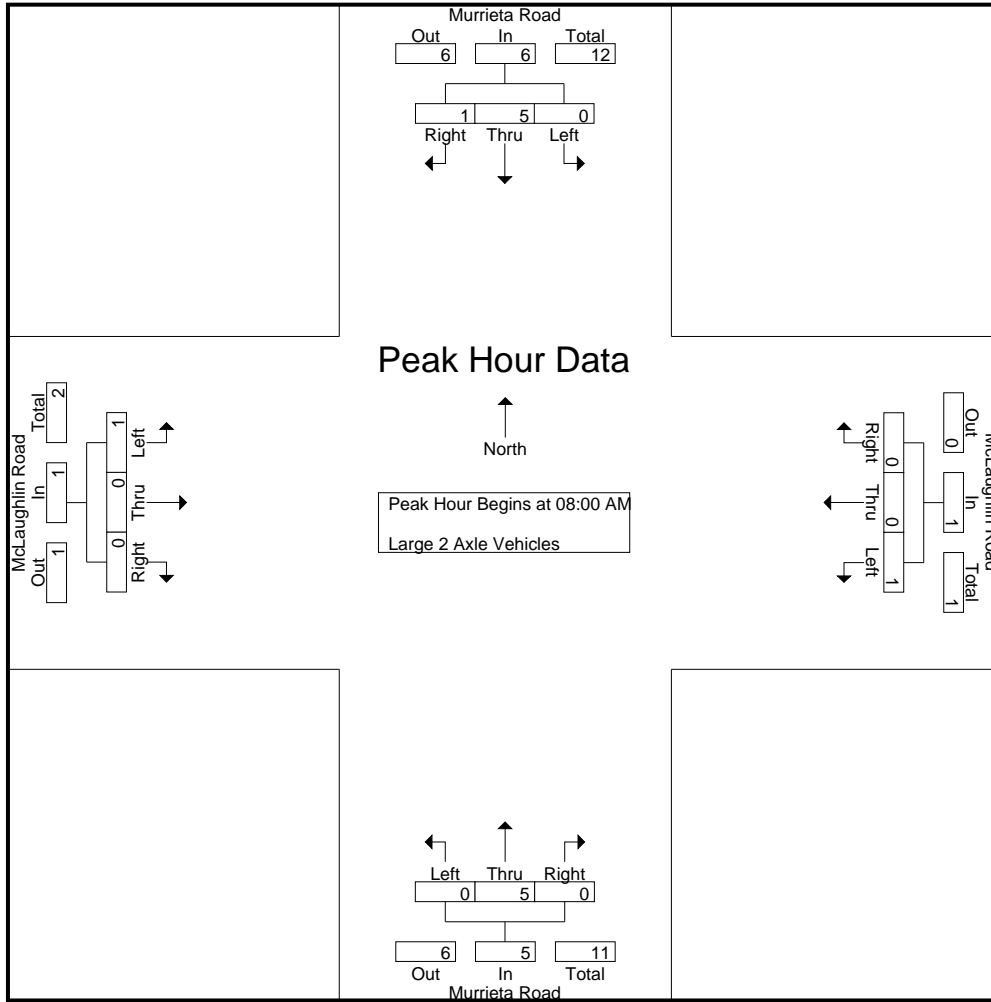
Start Time	Murrieta Road Southbound				McLaughlin Road Westbound				Murrieta Road Northbound				McLaughlin Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	4	0	4	0	0	0	0	0	1	0	1	0	0	0	0	5
07:15 AM	0	1	0	1	0	0	0	0	0	3	0	3	0	0	0	0	4
07:30 AM	0	2	0	2	0	0	1	1	0	1	0	1	0	0	0	0	4
07:45 AM	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
Total	0	11	0	11	0	0	1	1	0	5	0	5	0	0	0	0	17
08:00 AM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
08:15 AM	0	1	1	2	1	0	0	1	0	0	0	0	1	0	0	1	4
08:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:45 AM	0	3	0	3	0	0	0	0	0	2	0	2	0	0	0	0	5
Total	0	5	1	6	1	0	0	1	0	5	0	5	1	0	0	1	13
Grand Total	0	16	1	17	1	0	1	2	0	10	0	10	1	0	0	1	30
Apprch %	0	94.1	5.9		50	0	50		0	100	0		100	0	0		
Total %	0	53.3	3.3	56.7	3.3	0	3.3	6.7	0	33.3	0	33.3	3.3	0	0	3.3	

Start Time	Murrieta Road Southbound				McLaughlin Road Westbound				Murrieta Road Northbound				McLaughlin Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
08:00 AM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
08:15 AM	0	1	1	2	1	0	0	1	0	0	0	0	1	0	0	1	4
08:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:45 AM	0	3	0	3	0	0	0	0	0	2	0	2	0	0	0	0	5
Total Volume	0	5	1	6	1	0	0	1	0	5	0	5	1	0	0	1	13
% App. Total	0	83.3	16.7		100	0	0		0	100	0		100	0	0		
PHF	.000	.417	.250	.500	.250	.000	.000	.250	.000	.625	.000	.625	.250	.000	.000	.250	.650

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 08:00 AM

City of Menifee
 N/S: Murrieta Road
 E/W: McLaughlin Road
 Weather: Clear

File Name : 02_MEN_Murrieta_McLaughlin AM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 2



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

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0
+15 mins.	0	1	1	2	1	0	0	1	0	0	0	0	0	1	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
+45 mins.	0	3	0	3	0	0	0	0	0	2	0	2	0	0	0	0
Total Volume	0	5	1	6	1	0	0	1	0	5	0	5	1	0	0	1
% App. Total	0	83.3	16.7		100	0	0		0	100	0		100	0	0	
PHF	.000	.417	.250	.500	.250	.000	.000	.250	.000	.625	.000	.625	.250	.000	.000	.250

City of Menifee
 N/S: Murrieta Road
 E/W: McLaughlin Road
 Weather: Clear

File Name : 02_MEN_Murrieta_McLaughlin AM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 1

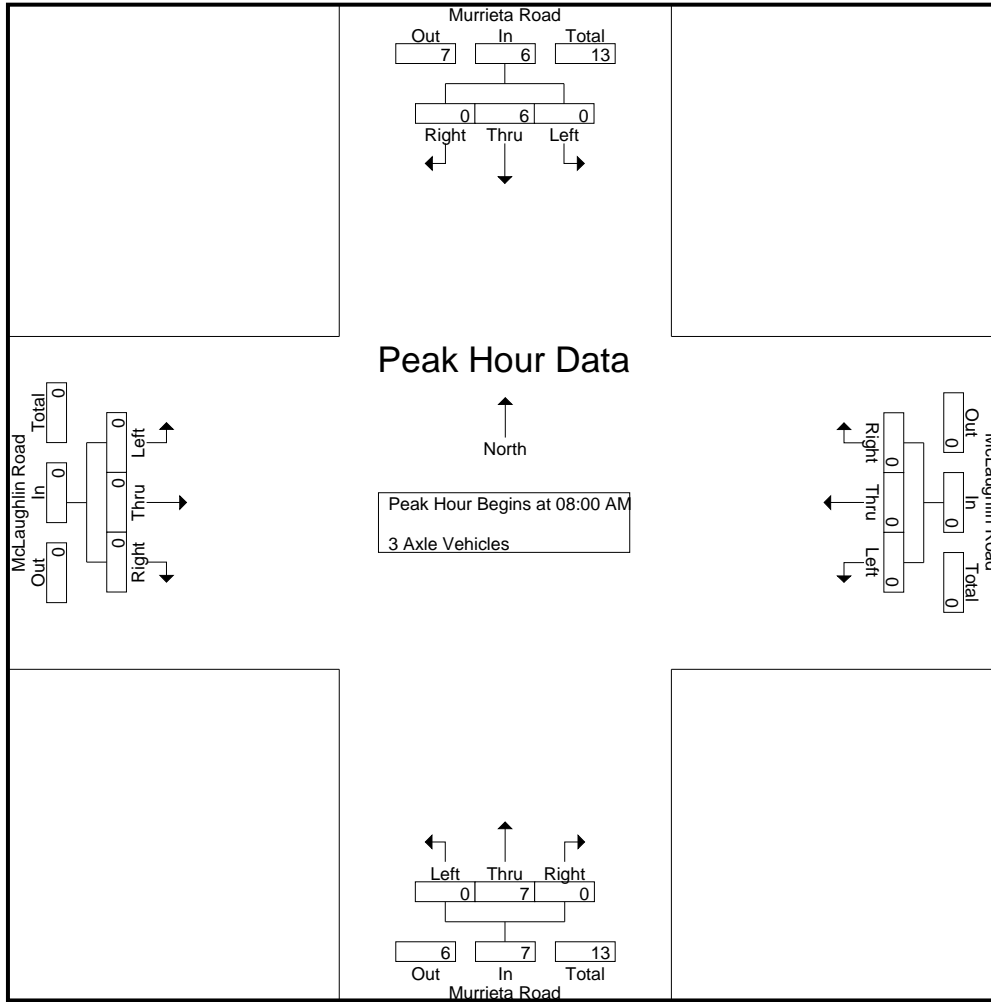
Groups Printed- 3 Axle Vehicles

Start Time	Murrieta Road Southbound				McLaughlin Road Westbound				Murrieta Road Northbound				McLaughlin Road Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:45 AM	0	3	0	3	0	0	0	0	0	0	1	0	1	0	0	0	0	4
Total	0	3	0	3	0	0	0	0	0	0	2	0	2	0	0	0	0	5
08:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:15 AM	0	4	0	4	0	0	0	0	0	0	1	0	1	0	0	0	0	5
08:30 AM	0	2	0	2	0	0	0	0	0	0	2	0	2	0	0	0	0	4
08:45 AM	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	3
Total	0	6	0	6	0	0	0	0	0	0	7	0	7	0	0	0	0	13
Grand Total	0	9	0	9	0	0	0	0	0	0	9	0	9	0	0	0	0	18
Apprch %	0	100	0		0	0	0		0	100	0		0	0	0			
Total %	0	50	0	50	0	0	0	0	0	50	0	50	0	0	0	0		

Start Time	Murrieta Road Southbound				McLaughlin Road Westbound				Murrieta Road Northbound				McLaughlin Road Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 08:00 AM																		
08:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:15 AM	0	4	0	4	0	0	0	0	0	0	1	0	1	0	0	0	0	5
08:30 AM	0	2	0	2	0	0	0	0	0	0	2	0	2	0	0	0	0	4
08:45 AM	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	3
Total Volume	0	6	0	6	0	0	0	0	0	0	7	0	7	0	0	0	0	13
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0			
PHF	.000	.375	.000	.375	.000	.000	.000	.000	.000	.000	.583	.000	.583	.000	.000	.000	.000	.650

City of Menifee
 N/S: Murrieta Road
 E/W: McLaughlin Road
 Weather: Clear

File Name : 02_MEN_Murrieta_McLaughlin AM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 2



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

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
+15 mins.	0	4	0	4	0	0	0	0	0	1	0	1	0	0	0	0
+30 mins.	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0
Total Volume	0	6	0	6	0	0	0	0	0	7	0	7	0	0	0	0
% App. Total	0	100	0	0	0	0	0	0	0	100	0	0	0	0	0	0
PHF	.000	.375	.000	.375	.000	.000	.000	.000	.000	.583	.000	.583	.000	.000	.000	.000

City of Menifee
 N/S: Murrieta Road
 E/W: McLaughlin Road
 Weather: Clear

File Name : 02_MEN_Murrieta_McLaughlin AM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	Murrieta Road Southbound				McLaughlin Road Westbound				Murrieta Road Northbound				McLaughlin Road Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08:00 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	2
Grand Total	1	1	0	2	0	0	1	1	0	0	0	0	0	0	0	0	0	3
Apprch %	50	50	0		0	0	100		0	0	0		0	0	0			
Total %	33.3	33.3	0	66.7	0	0	33.3	33.3	0	0	0	0	0	0	0	0		

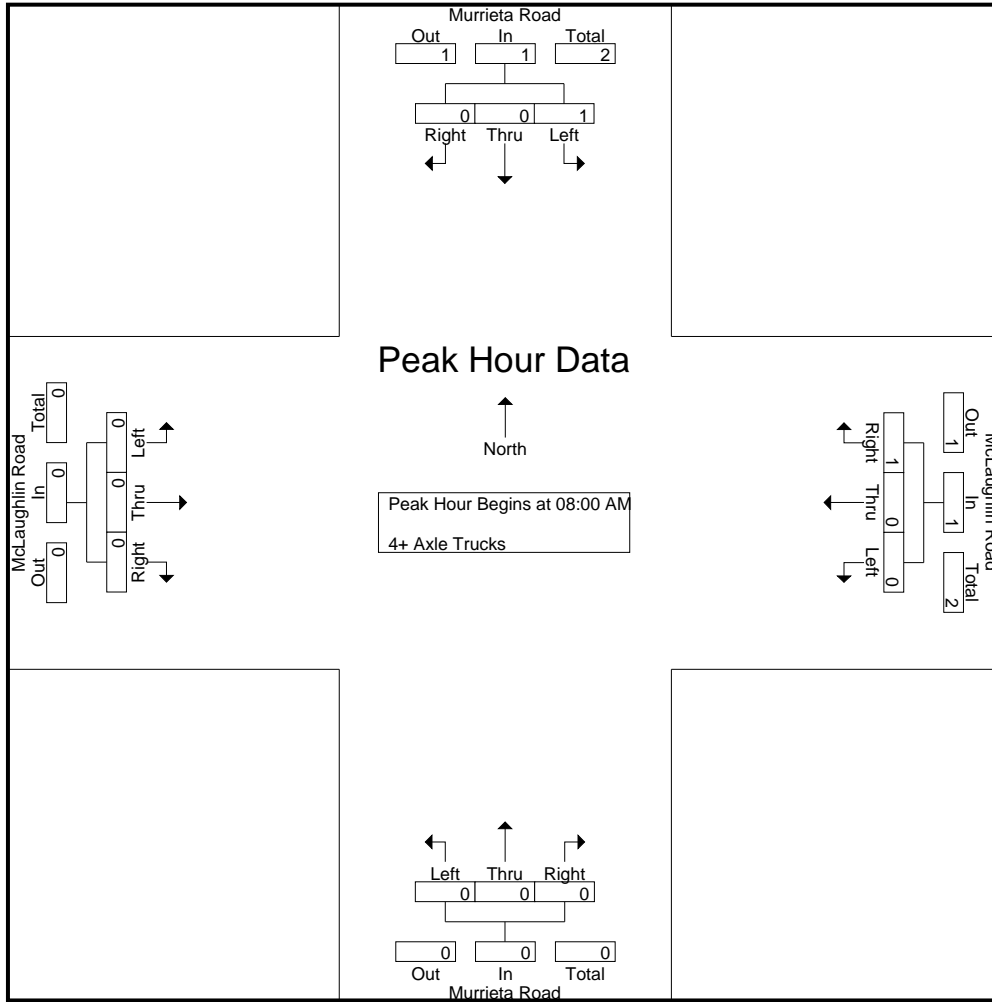
Start Time	Murrieta Road Southbound				McLaughlin Road Westbound				Murrieta Road Northbound				McLaughlin Road Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
08:00 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	2
% App. Total	100	0	0		0	0	100		0	0	0		0	0	0			
PHF	.250	.000	.000	.250	.000	.000	.250	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.500

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 08:00 AM

City of Menifee
 N/S: Murrieta Road
 E/W: McLaughlin Road
 Weather: Clear

File Name : 02_MEN_Murrieta_McLaughlin AM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 2



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

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0
% App. Total	100	0	0	100	0	0	100	100	0	0	0	0	0	0	0	0
PHF	.250	.000	.000	.250	.000	.000	.250	.250	.000	.000	.000	.000	.000	.000	.000	.000

City of Menifee
 N/S: Murrieta Road
 E/W: McLaughlin Road
 Weather: Clear

File Name : 02_MEN_Murrieta_McLaughlin PM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 1

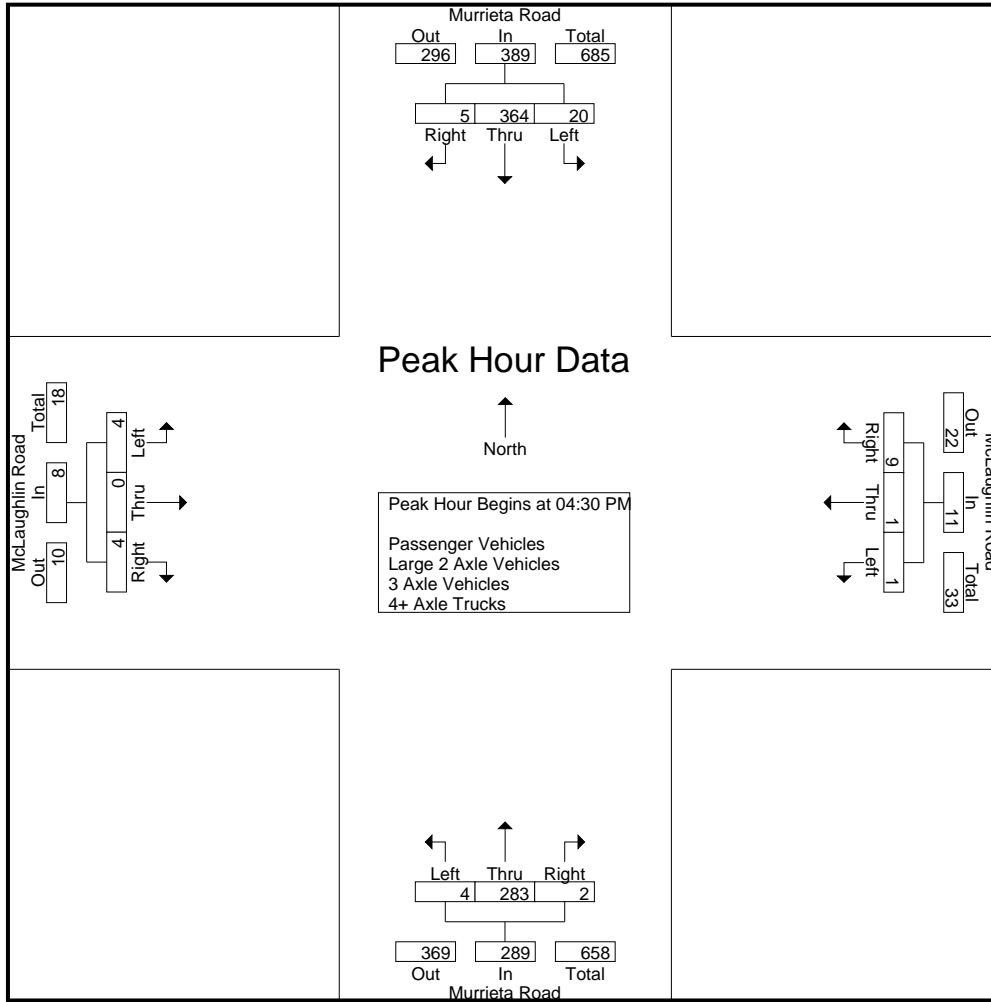
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Murrieta Road Southbound				McLaughlin Road Westbound				Murrieta Road Northbound				McLaughlin Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	5	81	1	87	0	0	2	2	1	86	1	88	1	0	1	2	179
04:15 PM	4	82	1	87	0	0	5	5	1	67	0	68	2	0	0	2	162
04:30 PM	6	89	0	95	1	1	1	3	0	77	0	77	1	0	1	2	177
04:45 PM	6	76	3	85	0	0	0	0	1	69	2	72	1	0	1	2	159
Total	21	328	5	354	1	1	8	10	3	299	3	305	5	0	3	8	677
05:00 PM	2	93	1	96	0	0	4	4	1	69	0	70	1	0	2	3	173
05:15 PM	6	106	1	113	0	0	4	4	2	68	0	70	1	0	0	1	188
05:30 PM	4	62	1	67	0	0	2	2	1	51	0	52	0	0	0	0	121
05:45 PM	3	59	0	62	1	0	2	3	1	39	1	41	2	0	1	3	109
Total	15	320	3	338	1	0	12	13	5	227	1	233	4	0	3	7	591
Grand Total	36	648	8	692	2	1	20	23	8	526	4	538	9	0	6	15	1268
Apprch %	5.2	93.6	1.2		8.7	4.3	87		1.5	97.8	0.7		60	0	40		
Total %	2.8	51.1	0.6	54.6	0.2	0.1	1.6	1.8	0.6	41.5	0.3	42.4	0.7	0	0.5	1.2	
Passenger Vehicles	34	640	8	682	2	0	20	22	8	515	3	526	9	0	5	14	1244
% Passenger Vehicles	94.4	98.8	100	98.6	100	0	100	95.7	100	97.9	75	97.8	100	0	83.3	93.3	98.1
Large 2 Axle Vehicles	1	7	0	8	0	1	0	1	0	10	1	11	0	0	1	1	21
% Large 2 Axle Vehicles	2.8	1.1	0	1.2	0	100	0	4.3	0	1.9	25	2	0	0	16.7	6.7	1.7
3 Axle Vehicles	1	1	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
% 3 Axle Vehicles	2.8	0.2	0	0.3	0	0	0	0	0	0.2	0	0.2	0	0	0	0	0.2
4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Start Time	Murrieta Road Southbound				McLaughlin Road Westbound				Murrieta Road Northbound				McLaughlin Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	6	89	0	95	1	1	1	3	0	77	0	77	1	0	1	2	177
04:45 PM	6	76	3	85	0	0	0	0	1	69	2	72	1	0	1	2	159
05:00 PM	2	93	1	96	0	0	4	4	1	69	0	70	1	0	2	3	173
05:15 PM	6	106	1	113	0	0	4	4	2	68	0	70	1	0	0	1	188
Total Volume	20	364	5	389	1	1	9	11	4	283	2	289	4	0	4	8	697
% App. Total	5.1	93.6	1.3		9.1	9.1	81.8		1.4	97.9	0.7		50	0	50		
PHF	.833	.858	.417	.861	.250	.250	.563	.688	.500	.919	.250	.938	1.00	.000	.500	.667	.927

City of Menifee
 N/S: Murrieta Road
 E/W: McLaughlin Road
 Weather: Clear

File Name : 02_MEN_Murrieta_McLaughlin PM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 2



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

	04:30 PM				05:00 PM				04:00 PM				04:15 PM			
+0 mins.	6	89	0	95	0	0	4	4	1	86	1	88	2	0	0	2
+15 mins.	6	76	3	85	0	0	4	4	1	67	0	68	1	0	1	2
+30 mins.	2	93	1	96	0	0	2	2	0	77	0	77	1	0	1	2
+45 mins.	6	106	1	113	1	0	2	3	1	69	2	72	1	0	2	3
Total Volume	20	364	5	389	1	0	12	13	3	299	3	305	5	0	4	9
% App. Total	5.1	93.6	1.3		7.7	0	92.3		1	98	1		55.6	0	44.4	
PHF	.833	.858	.417	.861	.250	.000	.750	.813	.750	.869	.375	.866	.625	.000	.500	.750

City of Menifee
 N/S: Murrieta Road
 E/W: McLaughlin Road
 Weather: Clear

File Name : 02_MEN_Murrieta_McLaughlin PM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	Murrieta Road Southbound				McLaughlin Road Westbound				Murrieta Road Northbound				McLaughlin Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	5	80	1	86	0	0	2	2	1	83	1	85	1	0	1	2	175
04:15 PM	3	81	1	85	0	0	5	5	1	67	0	68	2	0	0	2	160
04:30 PM	5	88	0	93	1	0	1	2	0	77	0	77	1	0	1	2	174
04:45 PM	6	76	3	85	0	0	0	0	1	67	1	69	1	0	0	1	155
Total	19	325	5	349	1	0	8	9	3	294	2	299	5	0	2	7	664
05:00 PM	2	92	1	95	0	0	4	4	1	67	0	68	1	0	2	3	170
05:15 PM	6	105	1	112	0	0	4	4	2	66	0	68	1	0	0	1	185
05:30 PM	4	61	1	66	0	0	2	2	1	49	0	50	0	0	0	0	118
05:45 PM	3	57	0	60	1	0	2	3	1	39	1	41	2	0	1	3	107
Total	15	315	3	333	1	0	12	13	5	221	1	227	4	0	3	7	580
Grand Total	34	640	8	682	2	0	20	22	8	515	3	526	9	0	5	14	1244
Apprch %	5	93.8	1.2		9.1	0	90.9		1.5	97.9	0.6		64.3	0	35.7		
Total %	2.7	51.4	0.6	54.8	0.2	0	1.6	1.8	0.6	41.4	0.2	42.3	0.7	0	0.4	1.1	

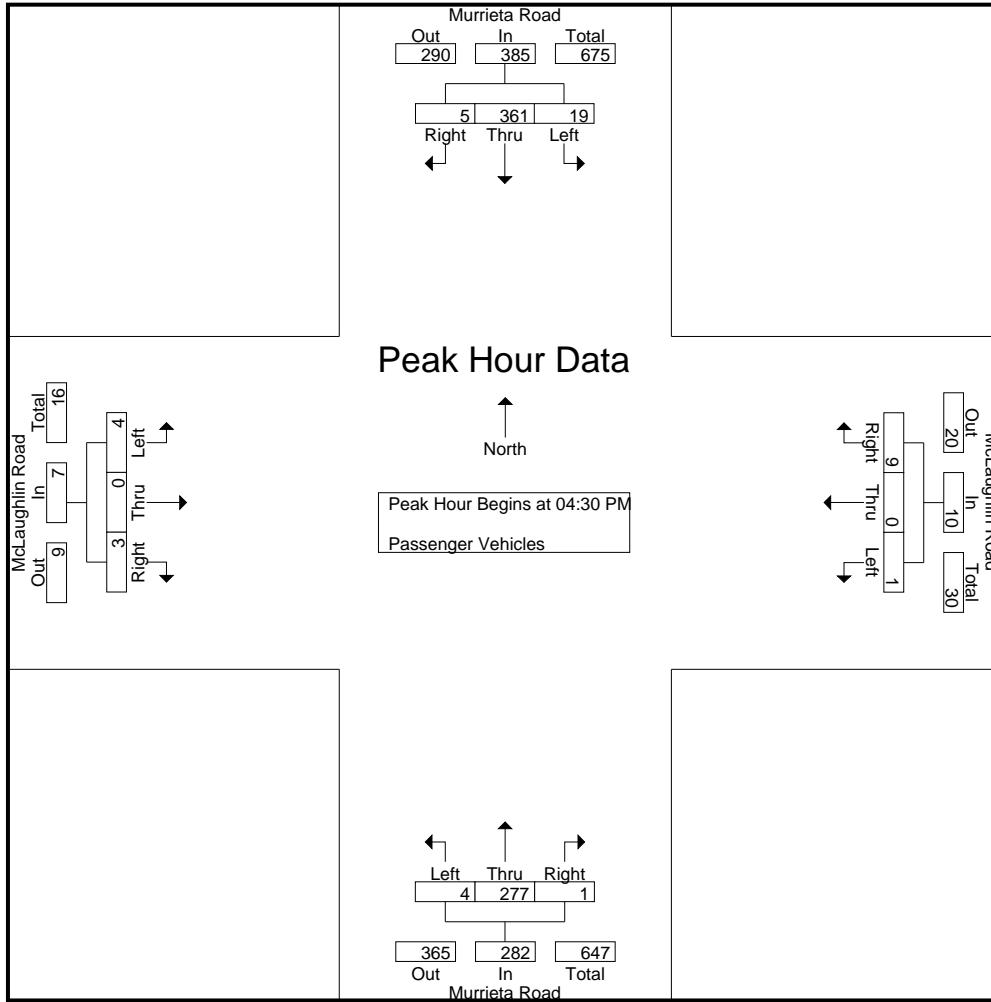
Start Time	Murrieta Road Southbound				McLaughlin Road Westbound				Murrieta Road Northbound				McLaughlin Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	5	88	0	93	1	0	1	2	0	77	0	77	1	0	1	2	174
04:45 PM	6	76	3	85	0	0	0	0	1	67	1	69	1	0	0	1	155
05:00 PM	2	92	1	95	0	0	4	4	1	67	0	68	1	0	2	3	170
05:15 PM	6	105	1	112	0	0	4	4	2	66	0	68	1	0	0	1	185
Total Volume	19	361	5	385	1	0	9	10	4	277	1	282	4	0	3	7	684
% App. Total	4.9	93.8	1.3		10	0	90		1.4	98.2	0.4		57.1	0	42.9		
PHF	.792	.860	.417	.859	.250	.000	.563	.625	.500	.899	.250	.916	1.00	.000	.375	.583	.924

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:30 PM

City of Menifee
 N/S: Murrieta Road
 E/W: McLaughlin Road
 Weather: Clear

File Name : 02_MEN_Murrieta_McLaughlin PM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 2



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	5	88	0	93	1	0	1	2	0	77	0	77	1	0	1	2
+15 mins.	6	76	3	85	0	0	0	0	1	67	1	69	1	0	0	1
+30 mins.	2	92	1	95	0	0	4	4	1	67	0	68	1	0	2	3
+45 mins.	6	105	1	112	0	0	4	4	2	66	0	68	1	0	0	1
Total Volume	19	361	5	385	1	0	9	10	4	277	1	282	4	0	3	7
% App. Total	4.9	93.8	1.3		10	0	90		1.4	98.2	0.4		57.1	0	42.9	
PHF	.792	.860	.417	.859	.250	.000	.563	.625	.500	.899	.250	.916	1.000	.000	.375	.583

City of Menifee
 N/S: Murrieta Road
 E/W: McLaughlin Road
 Weather: Clear

File Name : 02_MEN_Murrieta_McLaughlin PM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Murrieta Road Southbound				McLaughlin Road Westbound				Murrieta Road Northbound				McLaughlin Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	3
04:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:30 PM	1	1	0	2	0	1	0	1	0	0	0	0	0	0	0	0	3
04:45 PM	0	0	0	0	0	0	0	0	0	2	1	3	0	0	1	1	4
Total	1	2	0	3	0	1	0	1	0	5	1	6	0	0	1	1	11
05:00 PM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
05:15 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
05:30 PM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
05:45 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	5	0	5	0	0	0	0	0	5	0	5	0	0	0	0	10
Grand Total	1	7	0	8	0	1	0	1	0	10	1	11	0	0	1	1	21
Apprch %	12.5	87.5	0		0	100	0		0	90.9	9.1		0	0	100		
Total %	4.8	33.3	0	38.1	0	4.8	0	4.8	0	47.6	4.8	52.4	0	0	4.8	4.8	

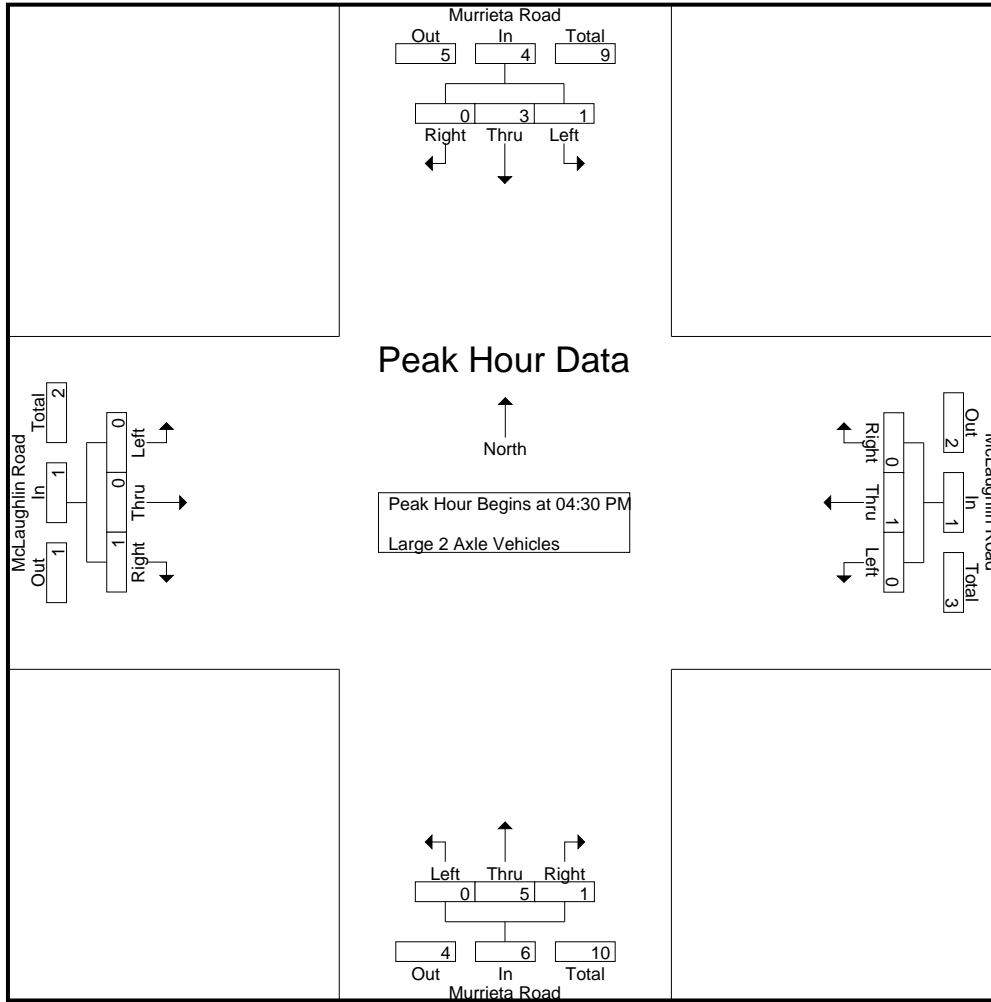
Start Time	Murrieta Road Southbound				McLaughlin Road Westbound				Murrieta Road Northbound				McLaughlin Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	1	1	0	2	0	1	0	1	0	0	0	0	0	0	0	0	3
04:45 PM	0	0	0	0	0	0	0	0	0	2	1	3	0	0	1	1	4
05:00 PM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
05:15 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Total Volume	1	3	0	4	0	1	0	1	0	5	1	6	0	0	1	1	12
% App. Total	25	75	0		0	100	0		0	83.3	16.7		0	0	100		
PHF	.250	.750	.000	.500	.000	.250	.000	.250	.000	.625	.250	.500	.000	.000	.250	.250	.750

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:30 PM

City of Menifee
 N/S: Murrieta Road
 E/W: McLaughlin Road
 Weather: Clear

File Name : 02_MEN_Murrieta_McLaughlin PM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 2



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	1	1	0	2	0	1	0	1	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	1
+30 mins.	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0
+45 mins.	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0
Total Volume	1	3	0	4	0	1	0	1	0	5	1	6	0	0	1	1
% App. Total	25	75	0		0	100	0		0	83.3	16.7		0	0	100	
PHF	.250	.750	.000	.500	.000	.250	.000	.250	.000	.625	.250	.500	.000	.000	.250	.250

City of Menifee
 N/S: Murrieta Road
 E/W: McLaughlin Road
 Weather: Clear

File Name : 02_MEN_Murrieta_McLaughlin PM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Murrieta Road Southbound				McLaughlin Road Westbound				Murrieta Road Northbound				McLaughlin Road Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
04:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:15 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1
Grand Total	1	1	0	2	0	0	0	0	0	1	0	1	0	0	0	0	0	3
Apprch %	50	50	0		0	0	0		0	100	0		0	0	0			
Total %	33.3	33.3	0	66.7	0	0	0	0	0	33.3	0	33.3	0	0	0	0	0	

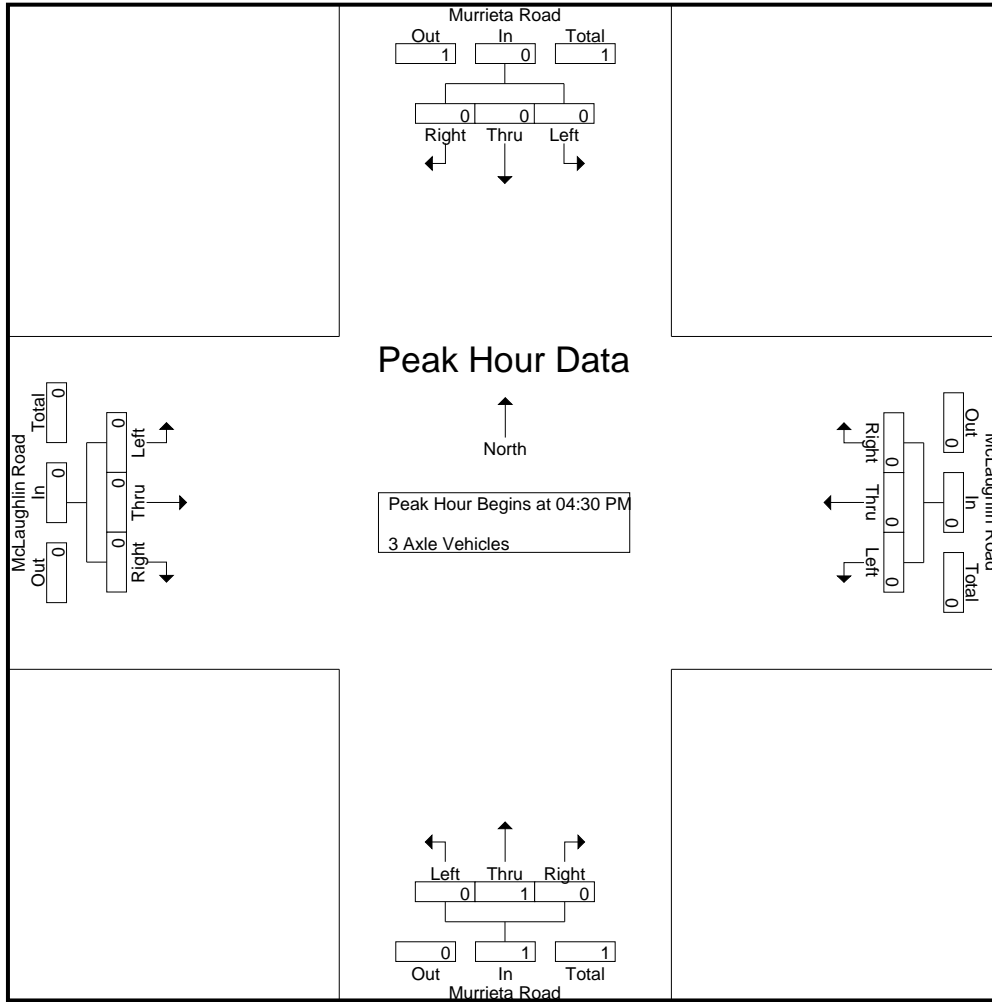
Start Time	Murrieta Road Southbound				McLaughlin Road Westbound				Murrieta Road Northbound				McLaughlin Road Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
Total Volume	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
% App. Total	0	0	0		0	0	0		0	100	0		0	0	0			
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:30 PM

City of Menifee
 N/S: Murrieta Road
 E/W: McLaughlin Road
 Weather: Clear

File Name : 02_MEN_Murrieta_McLaughlin PM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 2



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	100	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000

City of Menifee
 N/S: Murrieta Road
 E/W: McLaughlin Road
 Weather: Clear

File Name : 02_MEN_Murrieta_McLaughlin PM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 1

Groups Printed- 4+ Axle Trucks

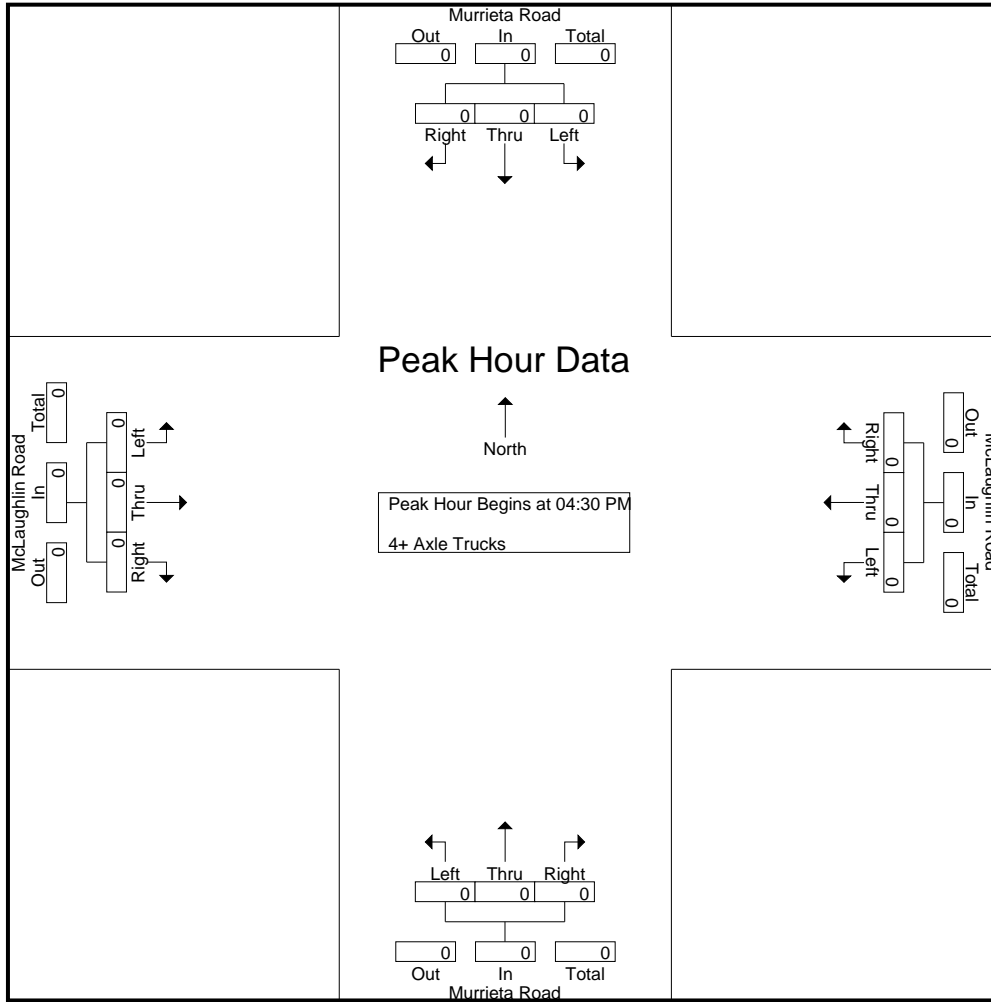
Start Time	Murrieta Road Southbound				McLaughlin Road Westbound				Murrieta Road Northbound				McLaughlin Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0		0	0	0		0	0	0		
Total %																	

Start Time	Murrieta Road Southbound				McLaughlin Road Westbound				Murrieta Road Northbound				McLaughlin Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:30 PM

City of Menifee
 N/S: Murrieta Road
 E/W: McLaughlin Road
 Weather: Clear

File Name : 02_MEN_Murrieta_McLaughlin PM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 2



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
1/22/19
TUESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

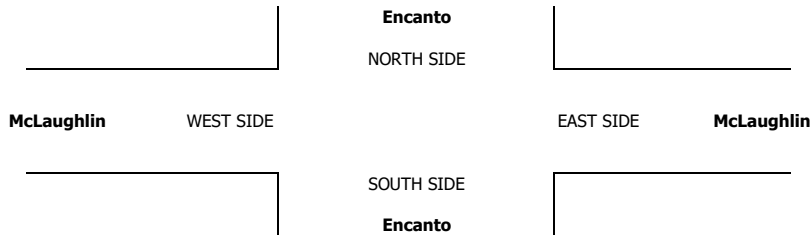
Menifee
Encanto
McLaughlin

PROJECT #: SC2048
LOCATION #: 20
CONTROL: STOP W

PCE Adjusted	NOTES:										AM PM MD OTHER OTHER	▲ N ◀ W S ▼	E ▶
	Class	1	2	3	4	5	6	7	8	9			
	Factor	1	1.5	2	3	2	2	2	2	2			

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL	U-TURNS				
	NL X	NT 1	NR 0	SL 0	ST 1	SR X	EL X	ET X	ER X	WL 0	WT X	WR 0		NB	SB	EB	WB	TTL

AM	7:00 AM	0	18	0	7	13	0	0	0	0	2	0	23	63					0
	7:15 AM	0	15	2	4	30	0	0	0	0	4	0	12	67					0
	7:30 AM	0	42	2	8	20	0	0	0	0	7	0	10	88					0
	7:45 AM	0	54	4	8	58	0	0	0	0	4	0	7	134					0
	8:00 AM	0	46	3	16	52	0	0	0	0	2	0	2	120					0
	8:15 AM	0	33	1	5	51	0	0	0	0	3	0	9	101					0
	8:30 AM	0	44	0	3	31	0	0	0	0	2	0	7	85					0
	8:45 AM	0	26	1	4	13	0	0	0	0	0	0	6	50					0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	VOLUMES	0	277	13	54	267	0	0	0	0	22	0	75	706	0	0	0	0	0
	APPROACH %	0%	96%	4%	17%	83%	0%	0%	0%	0%	23%	0%	77%						
APP/DEPART	289	/	352	320	/	289	0	/	66	97	/	0	0						
BEGIN PEAK HR	7:30 AM																		
VOLUMES	0	174	10	36	181	0	0	0	0	15	0	28	442						
APPROACH %	0%	95%	5%	17%	83%	0%	0%	0%	0%	35%	0%	65%							
PEAK HR FACTOR	0.798																		
APP/DEPART	184	/	202	217	/	195	0	/	46	42	/	0	0						
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:00 PM	0	30	0	14	33	0	0	0	0	1	0	6	83					0
	4:15 PM	0	30	1	13	28	0	0	0	0	0	0	4	76					0
	4:30 PM	0	30	1	18	25	0	0	0	0	2	0	4	79					0
	4:45 PM	0	29	5	11	24	0	0	0	0	5	0	9	81					0
	5:00 PM	0	27	3	14	23	0	0	0	0	1	0	15	83					0
	5:15 PM	0	27	1	9	27	0	0	0	0	4	0	9	76					0
	5:30 PM	0	23	4	16	20	0	0	0	0	0	0	12	74					0
	5:45 PM	0	19	2	17	24	0	0	0	0	0	0	7	69					0
	VOLUMES	0	215	17	110	202	0	0	0	0	13	0	64	619	0	0	0	0	0
	APPROACH %	0%	93%	7%	35%	65%	0%	0%	0%	0%	16%	0%	84%						
APP/DEPART	231	/	279	312	/	215	0	/	126	77	/	0	0						
BEGIN PEAK HR	4:30 PM																		
VOLUMES	0	113	10	51	98	0	0	0	0	12	0	37	319						
APPROACH %	0%	92%	8%	34%	66%	0%	0%	0%	0%	24%	0%	76%							
PEAK HR FACTOR	0.910																		
APP/DEPART	122	/	149	149	/	109	0	/	61	48	/	0	0						



City of Menifee
 N/S: Sherman Road
 E/W: McLaughlin Road
 Weather: Clear

File Name : 01_MEN_Sherman_McLaughlin AM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 1

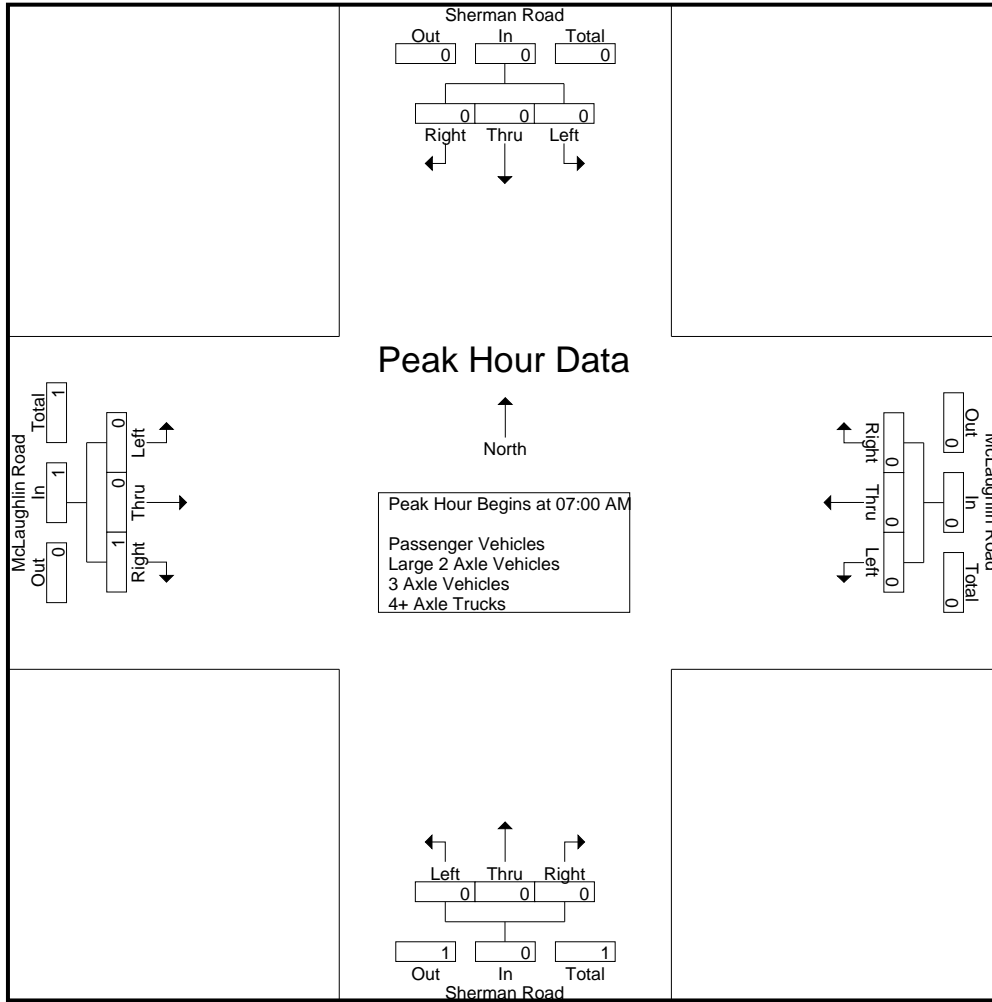
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Sherman Road Southbound				McLaughlin Road Westbound				Sherman Road Northbound				McLaughlin Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Apprch %	0	0	0		0	0	0		0	0	0		0	0	100		
Total %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	100	
Passenger Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
% Passenger Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	100	100
Large 2 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Large 2 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Start Time	Sherman Road Southbound				McLaughlin Road Westbound				Sherman Road Northbound				McLaughlin Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
% App. Total	0	0	0		0	0	0		0	0	0		0	0	100		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.250	.250

City of Menifee
 N/S: Sherman Road
 E/W: McLaughlin Road
 Weather: Clear

File Name : 01_MEN_Sherman_McLaughlin AM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 2



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	100
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.250

City of Menifee
 N/S: Sherman Road
 E/W: McLaughlin Road
 Weather: Clear

File Name : 01_MEN_Sherman_McLaughlin PM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 1

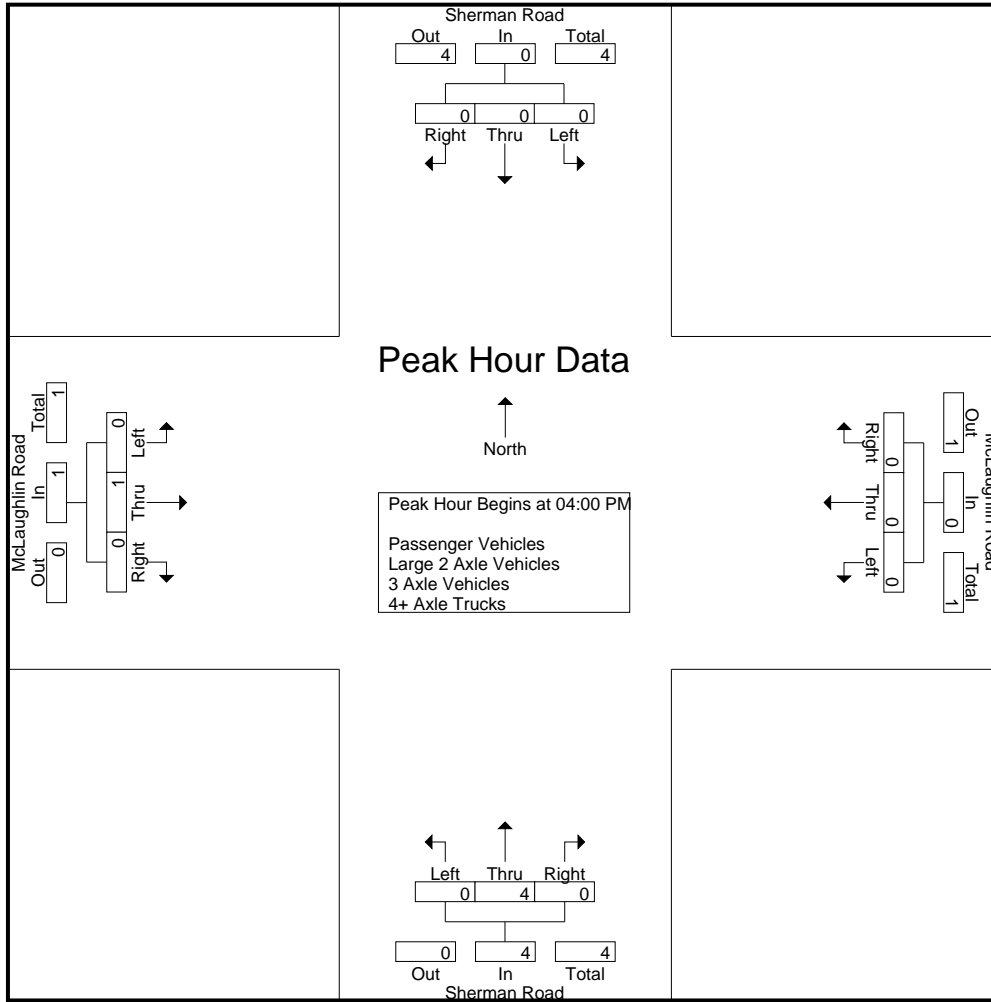
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Sherman Road Southbound				McLaughlin Road Westbound				Sherman Road Northbound				McLaughlin Road Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
04:00 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	1	0	1	0	3
Total	0	0	0	0	0	0	0	0	0	4	0	4	0	1	0	1	0	5
05:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
Total	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	0	3
Grand Total	0	2	0	2	0	0	0	0	0	5	0	5	0	1	0	1	0	8
Apprch %	0	100	0		0	0	0		0	100	0		0	100	0		0	
Total %	0	25	0	25	0	0	0	0	0	62.5	0	62.5	0	12.5	0	12.5		
Passenger Vehicles	0	2	0	2	0	0	0	0	0	5	0	5	0	1	0	1	0	8
% Passenger Vehicles	0	100	0	100	0	0	0	0	0	100	0	100	0	100	0	100	0	100
Large 2 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Large 2 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Start Time	Sherman Road Southbound				McLaughlin Road Westbound				Sherman Road Northbound				McLaughlin Road Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 04:00 PM																		
04:00 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	1	0	1	0	3
Total Volume	0	0	0	0	0	0	0	0	0	4	0	4	0	1	0	1	0	5
% App. Total	0	0	0		0	0	0		0	100	0		0	100	0		0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.500	.000	.500	.000	.250	.000	.250		.417

City of Menifee
 N/S: Sherman Road
 E/W: McLaughlin Road
 Weather: Clear

File Name : 01_MEN_Sherman_McLaughlin PM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 2



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

	04:45 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0
+15 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	1	0	1	0	0	0	0	0	2	0	2	0	1	0	1
Total Volume	0	2	0	2	0	0	0	0	0	4	0	4	0	1	0	1
% App. Total	0	100	0	0	0	0	0	0	0	100	0	0	0	100	0	0
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.500	.000	.500	.000	.250	.000	.250

City of Menifee
 N/S: Murrieta Road
 E/W: Rouse Road
 Weather: Clear

File Name : 03_MEN_Rouse_McLaughlin AM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 1

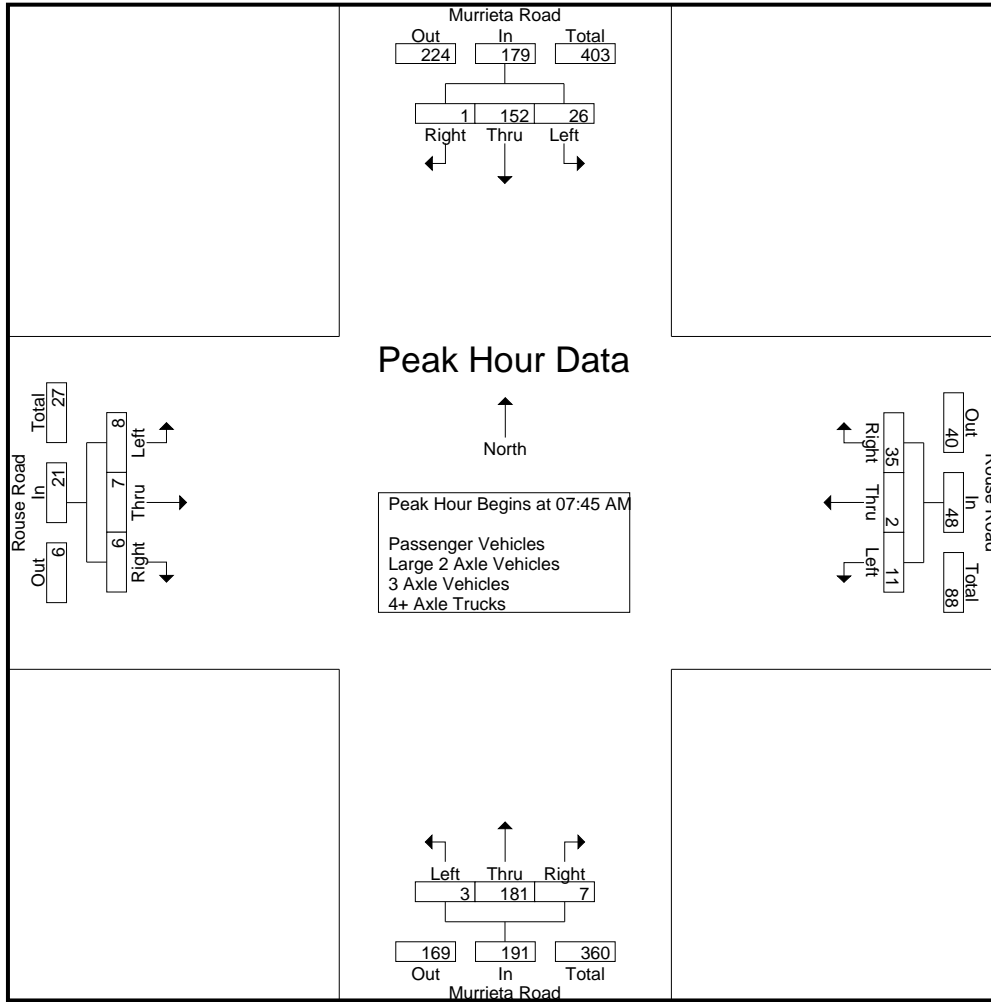
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Murrieta Road Southbound				Rouse Road Westbound				Murrieta Road Northbound				Rouse Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	24	1	25	3	0	5	8	0	48	1	49	2	1	1	4	86
07:15 AM	4	22	0	26	4	0	4	8	0	31	2	33	1	2	0	3	70
07:30 AM	5	24	3	32	0	2	6	8	1	39	3	43	4	4	1	9	92
07:45 AM	3	42	0	45	3	1	5	9	2	48	4	54	0	2	2	4	112
Total	12	112	4	128	10	3	20	33	3	166	10	179	7	9	4	20	360
08:00 AM	7	33	0	40	4	0	8	12	1	49	1	51	4	1	2	7	110
08:15 AM	5	38	1	44	1	0	11	12	0	39	1	40	4	3	1	8	104
08:30 AM	11	39	0	50	3	1	11	15	0	45	1	46	0	1	1	2	113
08:45 AM	8	30	0	38	1	0	7	8	1	48	2	51	2	1	0	3	100
Total	31	140	1	172	9	1	37	47	2	181	5	188	10	6	4	20	427
Grand Total	43	252	5	300	19	4	57	80	5	347	15	367	17	15	8	40	787
Apprch %	14.3	84	1.7		23.8	5	71.2		1.4	94.6	4.1		42.5	37.5	20		
Total %	5.5	32	0.6	38.1	2.4	0.5	7.2	10.2	0.6	44.1	1.9	46.6	2.2	1.9	1	5.1	
Passenger Vehicles	43	226	5	274	19	4	57	80	5	333	14	352	16	14	8	38	744
% Passenger Vehicles	100	89.7	100	91.3	100	100	100	100	100	96	93.3	95.9	94.1	93.3	100	95	94.5
Large 2 Axle Vehicles	0	15	0	15	0	0	0	0	0	5	1	6	1	1	0	2	23
% Large 2 Axle Vehicles	0	6	0	5	0	0	0	0	0	1.4	6.7	1.6	5.9	6.7	0	5	2.9
3 Axle Vehicles	0	10	0	10	0	0	0	0	0	9	0	9	0	0	0	0	19
% 3 Axle Vehicles	0	4	0	3.3	0	0	0	0	0	2.6	0	2.5	0	0	0	0	2.4
4+ Axle Trucks	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
% 4+ Axle Trucks	0	0.4	0	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0.1

Start Time	Murrieta Road Southbound				Rouse Road Westbound				Murrieta Road Northbound				Rouse Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	3	42	0	45	3	1	5	9	2	48	4	54	0	2	2	4	112
08:00 AM	7	33	0	40	4	0	8	12	1	49	1	51	4	1	2	7	110
08:15 AM	5	38	1	44	1	0	11	12	0	39	1	40	4	3	1	8	104
08:30 AM	11	39	0	50	3	1	11	15	0	45	1	46	0	1	1	2	113
Total Volume	26	152	1	179	11	2	35	48	3	181	7	191	8	7	6	21	439
% App. Total	14.5	84.9	0.6		22.9	4.2	72.9		1.6	94.8	3.7		38.1	33.3	28.6		
PHF	.591	.905	.250	.895	.688	.500	.795	.800	.375	.923	.438	.884	.500	.583	.750	.656	.971

City of Menifee
 N/S: Murrieta Road
 E/W: Rouse Road
 Weather: Clear

File Name : 03_MEN_Rouse_McLaughlin AM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 2



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

	07:45 AM				07:45 AM				07:45 AM				07:30 AM			
+0 mins.	3	42	0	45	3	1	5	9	2	48	4	54	4	4	1	9
+15 mins.	7	33	0	40	4	0	8	12	1	49	1	51	0	2	2	4
+30 mins.	5	38	1	44	1	0	11	12	0	39	1	40	4	1	2	7
+45 mins.	11	39	0	50	3	1	11	15	0	45	1	46	4	3	1	8
Total Volume	26	152	1	179	11	2	35	48	3	181	7	191	12	10	6	28
% App. Total	14.5	84.9	0.6		22.9	4.2	72.9		1.6	94.8	3.7		42.9	35.7	21.4	
PHF	.591	.905	.250	.895	.688	.500	.795	.800	.375	.923	.438	.884	.750	.625	.750	.778

City of Menifee
 N/S: Murrieta Road
 E/W: Rouse Road
 Weather: Clear

File Name : 03_MEN_Rouse_McLaughlin AM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 1

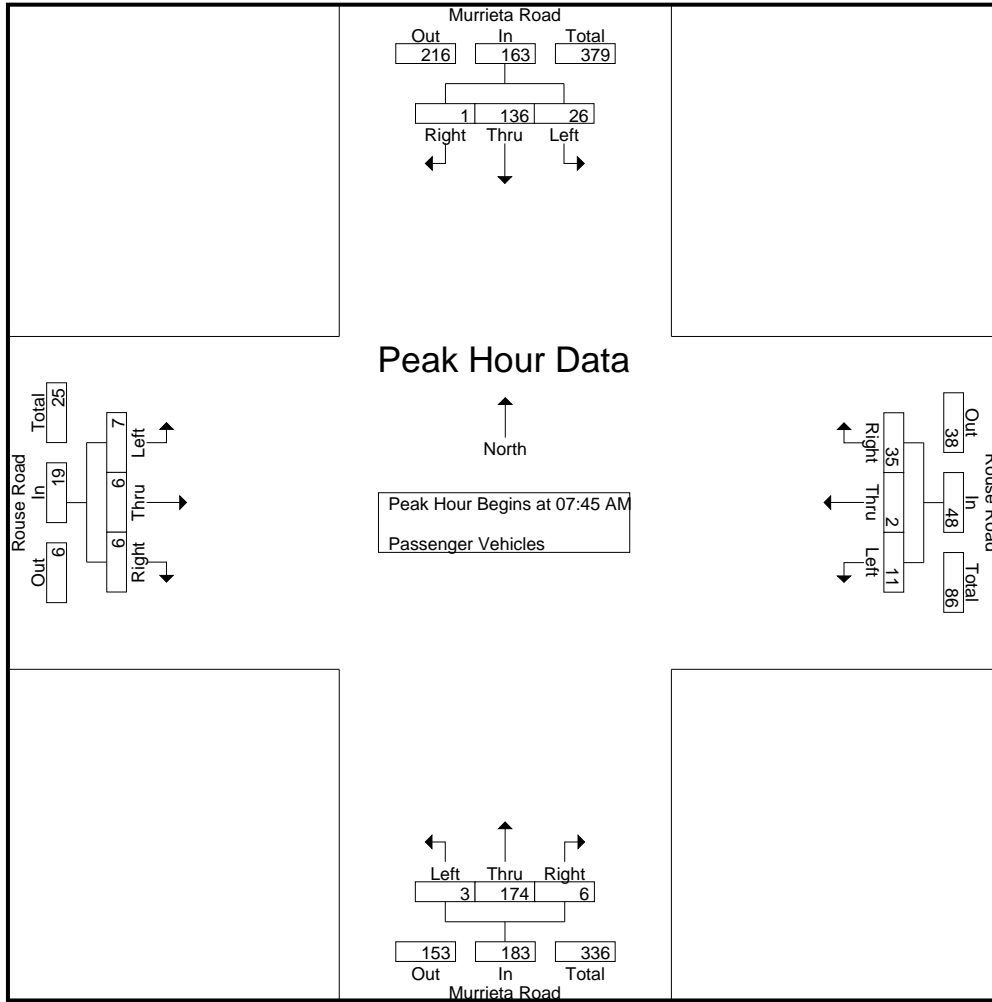
Groups Printed- Passenger Vehicles

Start Time	Murrieta Road Southbound				Rouse Road Westbound				Murrieta Road Northbound				Rouse Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	20	1	21	3	0	5	8	0	47	1	48	2	1	1	4	81
07:15 AM	4	21	0	25	4	0	4	8	0	30	2	32	1	2	0	3	68
07:30 AM	5	21	3	29	0	2	6	8	1	38	3	42	4	4	1	9	88
07:45 AM	3	35	0	38	3	1	5	9	2	47	3	52	0	2	2	4	103
Total	12	97	4	113	10	3	20	33	3	162	9	174	7	9	4	20	340
08:00 AM	7	32	0	39	4	0	8	12	1	46	1	48	4	1	2	7	106
08:15 AM	5	32	1	38	1	0	11	12	0	39	1	40	3	3	1	7	97
08:30 AM	11	37	0	48	3	1	11	15	0	42	1	43	0	0	1	1	107
08:45 AM	8	28	0	36	1	0	7	8	1	44	2	47	2	1	0	3	94
Total	31	129	1	161	9	1	37	47	2	171	5	178	9	5	4	18	404
Grand Total	43	226	5	274	19	4	57	80	5	333	14	352	16	14	8	38	744
Apprch %	15.7	82.5	1.8		23.8	5	71.2		1.4	94.6	4		42.1	36.8	21.1		
Total %	5.8	30.4	0.7	36.8	2.6	0.5	7.7	10.8	0.7	44.8	1.9	47.3	2.2	1.9	1.1	5.1	

Start Time	Murrieta Road Southbound				Rouse Road Westbound				Murrieta Road Northbound				Rouse Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	3	35	0	38	3	1	5	9	2	47	3	52	0	2	2	4	103
08:00 AM	7	32	0	39	4	0	8	12	1	46	1	48	4	1	2	7	106
08:15 AM	5	32	1	38	1	0	11	12	0	39	1	40	3	3	1	7	97
08:30 AM	11	37	0	48	3	1	11	15	0	42	1	43	0	0	1	1	107
Total Volume	26	136	1	163	11	2	35	48	3	174	6	183	7	6	6	19	413
% App. Total	16	83.4	0.6		22.9	4.2	72.9		1.6	95.1	3.3		36.8	31.6	31.6		
PHF	.591	.919	.250	.849	.688	.500	.795	.800	.375	.926	.500	.880	.438	.500	.750	.679	.965

City of Menifee
 N/S: Murrieta Road
 E/W: Rouse Road
 Weather: Clear

File Name : 03_MEN_Rouse_McLaughlin AM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	3	35	0	38	3	1	5	9	2	47	3	52	0	2	2	4
+15 mins.	7	32	0	39	4	0	8	12	1	46	1	48	4	1	2	7
+30 mins.	5	32	1	38	1	0	11	12	0	39	1	40	3	3	1	7
+45 mins.	11	37	0	48	3	1	11	15	0	42	1	43	0	0	1	1
Total Volume	26	136	1	163	11	2	35	48	3	174	6	183	7	6	6	19
% App. Total	16	83.4	0.6		22.9	4.2	72.9		1.6	95.1	3.3		36.8	31.6	31.6	
PHF	.591	.919	.250	.849	.688	.500	.795	.800	.375	.926	.500	.880	.438	.500	.750	.679

City of Menifee
 N/S: Murrieta Road
 E/W: Rouse Road
 Weather: Clear

File Name : 03_MEN_Rouse_McLaughlin AM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Murrieta Road Southbound				Rouse Road Westbound				Murrieta Road Northbound				Rouse Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	4	0	4	0	0	0	0	0	1	0	1	0	0	0	0	5
07:15 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
07:30 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
07:45 AM	0	4	0	4	0	0	0	0	0	0	1	1	0	0	0	0	5
Total	0	11	0	11	0	0	0	0	0	2	1	3	0	0	0	0	14
08:00 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
08:15 AM	0	2	0	2	0	0	0	0	0	0	0	0	1	0	0	1	3
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:45 AM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
Total	0	4	0	4	0	0	0	0	0	3	0	3	1	1	0	2	9
Grand Total	0	15	0	15	0	0	0	0	0	5	1	6	1	1	0	2	23
Apprch %	0	100	0		0	0	0		0	83.3	16.7		50	50	0		
Total %	0	65.2	0	65.2	0	0	0	0	0	21.7	4.3	26.1	4.3	4.3	0	8.7	

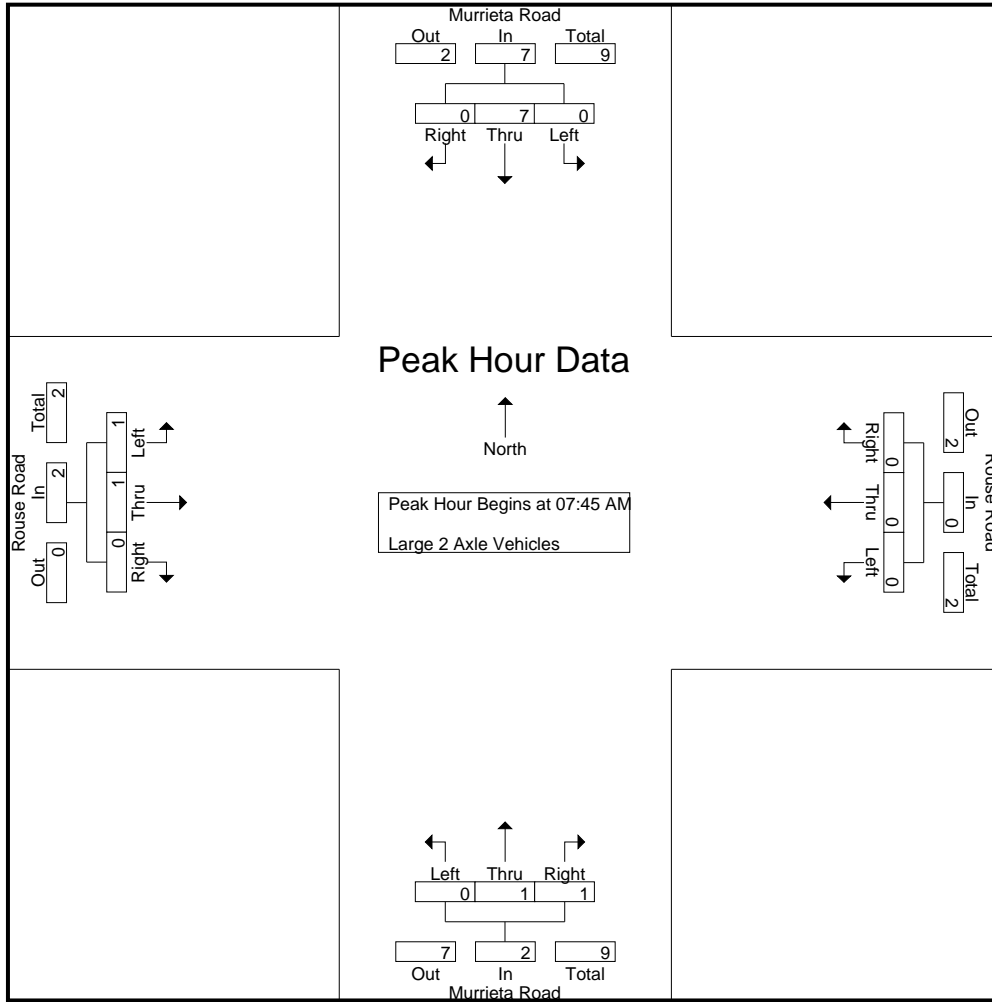
Start Time	Murrieta Road Southbound				Rouse Road Westbound				Murrieta Road Northbound				Rouse Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:45 AM	0	4	0	4	0	0	0	0	0	0	1	1	0	0	0	0	5
08:00 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
08:15 AM	0	2	0	2	0	0	0	0	0	0	0	0	1	0	0	1	3
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	0	7	0	7	0	0	0	0	0	1	1	2	1	1	0	2	11
% App. Total	0	100	0		0	0	0		0	50	50		50	50	0		
PHF	.000	.438	.000	.438	.000	.000	.000	.000	.000	.250	.250	.500	.250	.250	.000	.500	.550

Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:45 AM

City of Menifee
 N/S: Murrieta Road
 E/W: Rouse Road
 Weather: Clear

File Name : 03_MEN_Rouse_McLaughlin AM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	0	4	0	4	0	0	0	0	0	0	1	1	0	0	0	0
+15 mins.	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0
+30 mins.	0	2	0	2	0	0	0	0	0	0	0	0	1	0	0	1
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Total Volume	0	7	0	7	0	0	0	0	0	1	1	2	1	1	0	2
% App. Total	0	100	0		0	0	0		0	50	50		50	50	0	
PHF	.000	.438	.000	.438	.000	.000	.000	.000	.000	.250	.250	.500	.250	.250	.000	.500

City of Menifee
 N/S: Murrieta Road
 E/W: Rouse Road
 Weather: Clear

File Name : 03_MEN_Rouse_McLaughlin AM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Murrieta Road Southbound				Rouse Road Westbound				Murrieta Road Northbound				Rouse Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:45 AM	0	3	0	3	0	0	0	0	0	1	0	1	0	0	0	0	4
Total	0	3	0	3	0	0	0	0	0	2	0	2	0	0	0	0	5
08:00 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
08:15 AM	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
08:30 AM	0	2	0	2	0	0	0	0	0	3	0	3	0	0	0	0	5
08:45 AM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
Total	0	7	0	7	0	0	0	0	0	7	0	7	0	0	0	0	14
Grand Total	0	10	0	10	0	0	0	0	0	9	0	9	0	0	0	0	19
Apprch %	0	100	0		0	0	0		0	100	0		0	0	0		
Total %	0	52.6	0	52.6	0	0	0	0	0	47.4	0	47.4	0	0	0	0	

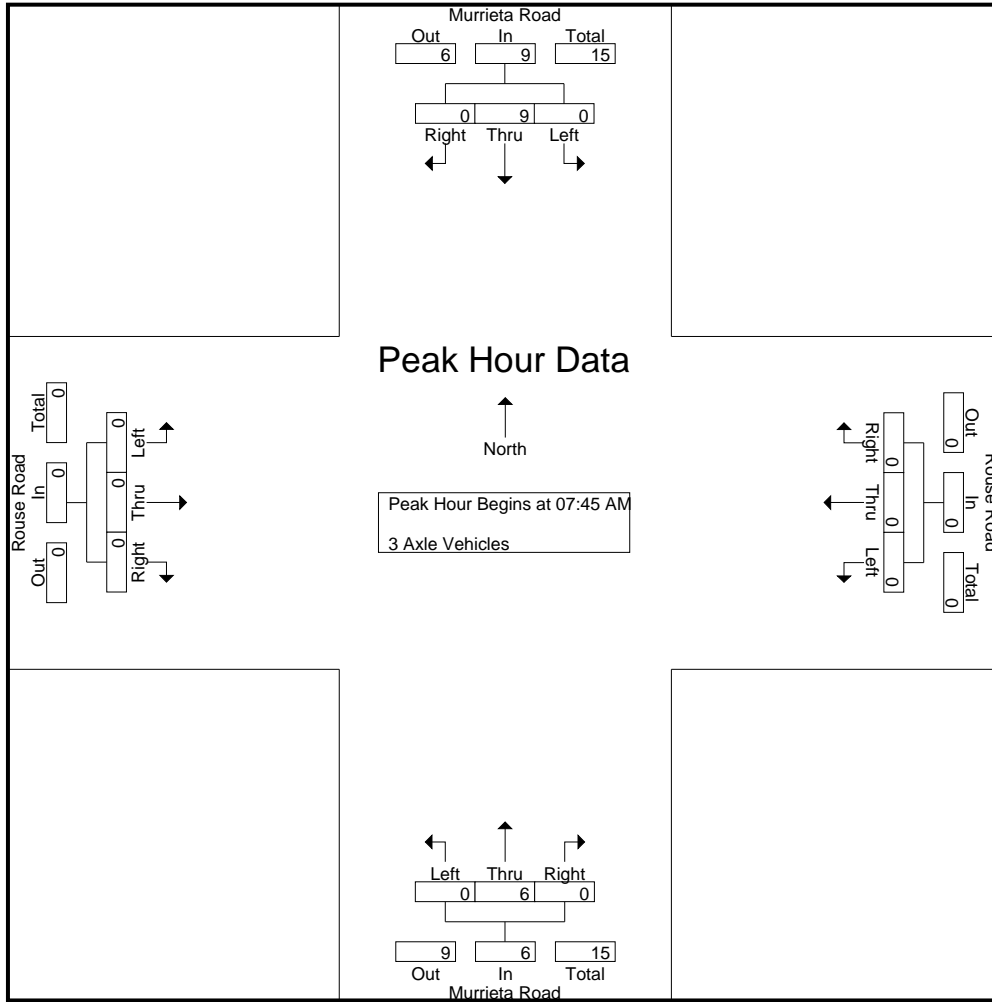
Start Time	Murrieta Road Southbound				Rouse Road Westbound				Murrieta Road Northbound				Rouse Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:45 AM	0	3	0	3	0	0	0	0	0	1	0	1	0	0	0	0	4
08:00 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
08:15 AM	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
08:30 AM	0	2	0	2	0	0	0	0	0	3	0	3	0	0	0	0	5
Total Volume	0	9	0	9	0	0	0	0	0	6	0	6	0	0	0	0	15
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.563	.000	.563	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.750

Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:45 AM

City of Menifee
 N/S: Murrieta Road
 E/W: Rouse Road
 Weather: Clear

File Name : 03_MEN_Rouse_McLaughlin AM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	0	3	0	3	0	0	0	0	0	1	0	1	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0
+30 mins.	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	2	0	2	0	0	0	0	0	3	0	3	0	0	0	0
Total Volume	0	9	0	9	0	0	0	0	0	6	0	6	0	0	0	0
% App. Total	0	100	0	0	0	0	0	0	0	100	0	0	0	0	0	0
PHF	.000	.563	.000	.563	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000

City of Menifee
 N/S: Murrieta Road
 E/W: Rouse Road
 Weather: Clear

File Name : 03_MEN_Rouse_McLaughlin AM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 1

Groups Printed- 4+ Axle Trucks

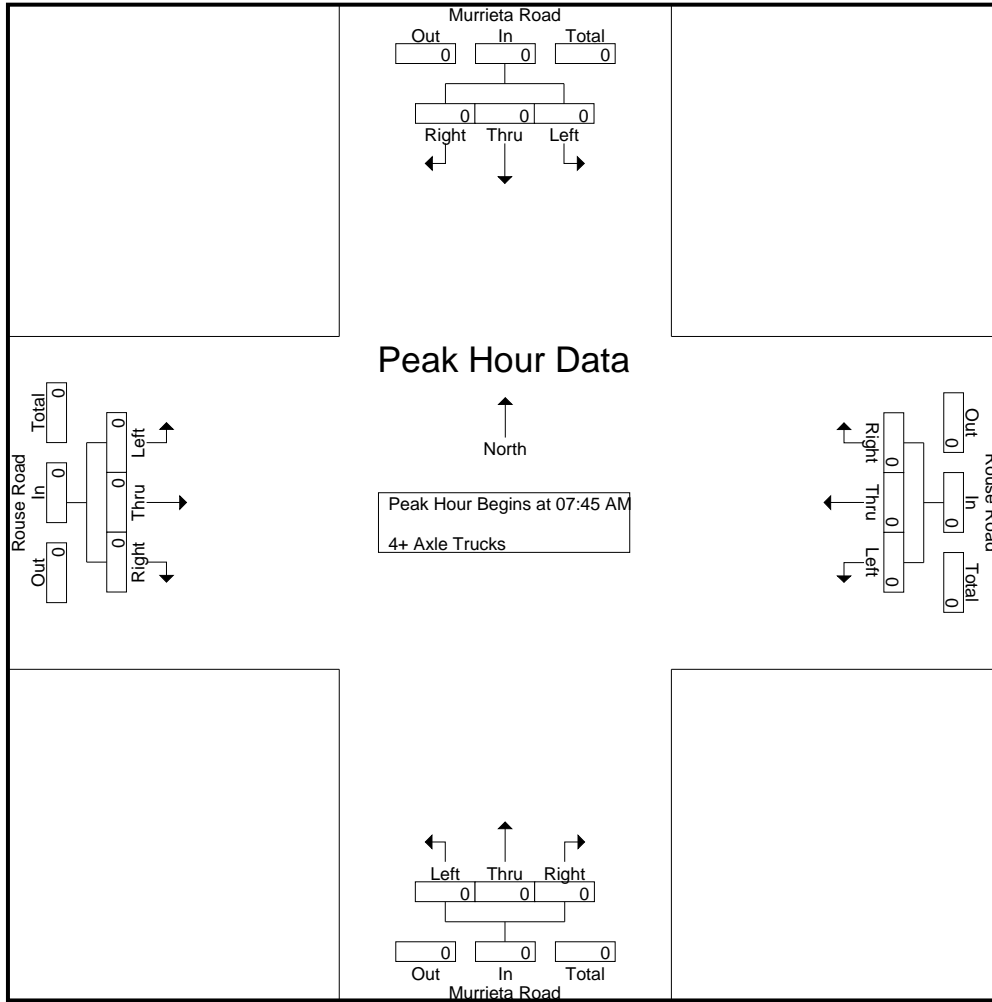
Start Time	Murrieta Road Southbound				Rouse Road Westbound				Murrieta Road Northbound				Rouse Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Apprch %	0	100	0		0	0	0		0	0	0		0	0	0		
Total %	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0	

Start Time	Murrieta Road Southbound				Rouse Road Westbound				Murrieta Road Northbound				Rouse Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:45 AM

City of Menifee
 N/S: Murrieta Road
 E/W: Rouse Road
 Weather: Clear

File Name : 03_MEN_Rouse_McLaughlin AM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Menifee
 N/S: Murrieta Road
 E/W: Rouse Road
 Weather: Clear

File Name : 03_MEN_Rouse_McLaughlin PM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 1

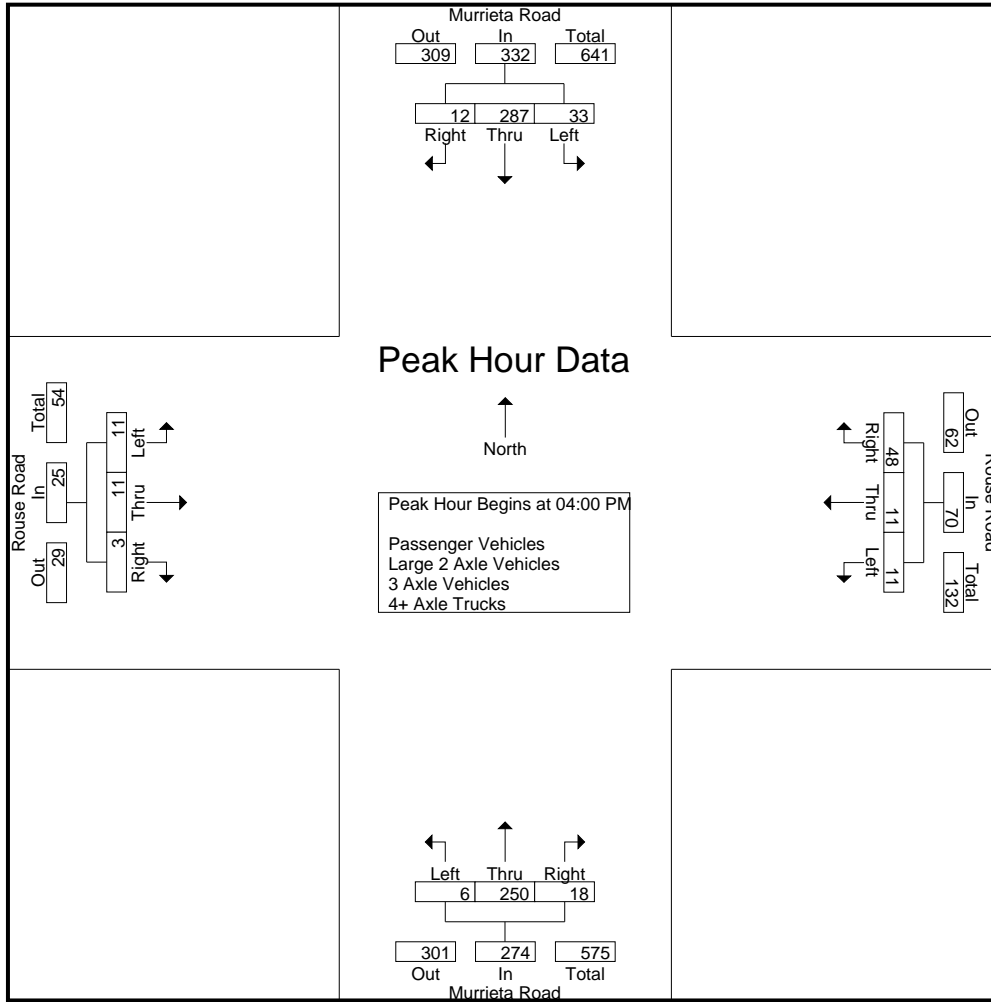
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Murrieta Road Southbound				Rouse Road Westbound				Murrieta Road Northbound				Rouse Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	8	64	1	73	5	1	13	19	2	73	5	80	2	2	1	5	177
04:15 PM	8	77	3	88	0	2	10	12	1	59	5	65	2	3	0	5	170
04:30 PM	7	80	5	92	5	3	15	23	0	55	6	61	5	4	1	10	186
04:45 PM	10	66	3	79	1	5	10	16	3	63	2	68	2	2	1	5	168
Total	33	287	12	332	11	11	48	70	6	250	18	274	11	11	3	25	701
05:00 PM	9	69	8	86	5	6	13	24	0	43	3	46	7	3	0	10	166
05:15 PM	15	82	6	103	2	1	13	16	1	50	2	53	4	1	2	7	179
05:30 PM	7	57	5	69	6	1	10	17	0	39	5	44	0	3	1	4	134
05:45 PM	7	53	4	64	4	2	10	16	0	41	2	43	1	1	0	2	125
Total	38	261	23	322	17	10	46	73	1	173	12	186	12	8	3	23	604
Grand Total	71	548	35	654	28	21	94	143	7	423	30	460	23	19	6	48	1305
Apprch %	10.9	83.8	5.4		19.6	14.7	65.7		1.5	92	6.5		47.9	39.6	12.5		
Total %	5.4	42	2.7	50.1	2.1	1.6	7.2	11	0.5	32.4	2.3	35.2	1.8	1.5	0.5	3.7	
Passenger Vehicles	71	540	34	645	27	21	91	139	7	413	29	449	22	19	6	47	1280
% Passenger Vehicles	100	98.5	97.1	98.6	96.4	100	96.8	97.2	100	97.6	96.7	97.6	95.7	100	100	97.9	98.1
Large 2 Axle Vehicles	0	7	1	8	1	0	3	4	0	9	1	10	1	0	0	1	23
% Large 2 Axle Vehicles	0	1.3	2.9	1.2	3.6	0	3.2	2.8	0	2.1	3.3	2.2	4.3	0	0	2.1	1.8
3 Axle Vehicles	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
% 3 Axle Vehicles	0	0.2	0	0.2	0	0	0	0	0	0.2	0	0.2	0	0	0	0	0.2
4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Start Time	Murrieta Road Southbound				Rouse Road Westbound				Murrieta Road Northbound				Rouse Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	8	64	1	73	5	1	13	19	2	73	5	80	2	2	1	5	177
04:15 PM	8	77	3	88	0	2	10	12	1	59	5	65	2	3	0	5	170
04:30 PM	7	80	5	92	5	3	15	23	0	55	6	61	5	4	1	10	186
04:45 PM	10	66	3	79	1	5	10	16	3	63	2	68	2	2	1	5	168
Total Volume	33	287	12	332	11	11	48	70	6	250	18	274	11	11	3	25	701
% App. Total	9.9	86.4	3.6		15.7	15.7	68.6		2.2	91.2	6.6		44	44	12		
PHF	.825	.897	.600	.902	.550	.550	.800	.761	.500	.856	.750	.856	.550	.688	.750	.625	.942

City of Menifee
 N/S: Murrieta Road
 E/W: Rouse Road
 Weather: Clear

File Name : 03_MEN_Rouse_McLaughlin PM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 2



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

	04:30 PM				04:30 PM				04:00 PM				04:30 PM			
+0 mins.	7	80	5	92	5	3	15	23	2	73	5	80	5	4	1	10
+15 mins.	10	66	3	79	1	5	10	16	1	59	5	65	2	2	1	5
+30 mins.	9	69	8	86	5	6	13	24	0	55	6	61	7	3	0	10
+45 mins.	15	82	6	103	2	1	13	16	3	63	2	68	4	1	2	7
Total Volume	41	297	22	360	13	15	51	79	6	250	18	274	18	10	4	32
% App. Total	11.4	82.5	6.1		16.5	19	64.6		2.2	91.2	6.6		56.2	31.2	12.5	
PHF	.683	.905	.688	.874	.650	.625	.850	.823	.500	.856	.750	.856	.643	.625	.500	.800

City of Menifee
 N/S: Murrieta Road
 E/W: Rouse Road
 Weather: Clear

File Name : 03_MEN_Rouse_McLaughlin PM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 1

Groups Printed- Passenger Vehicles

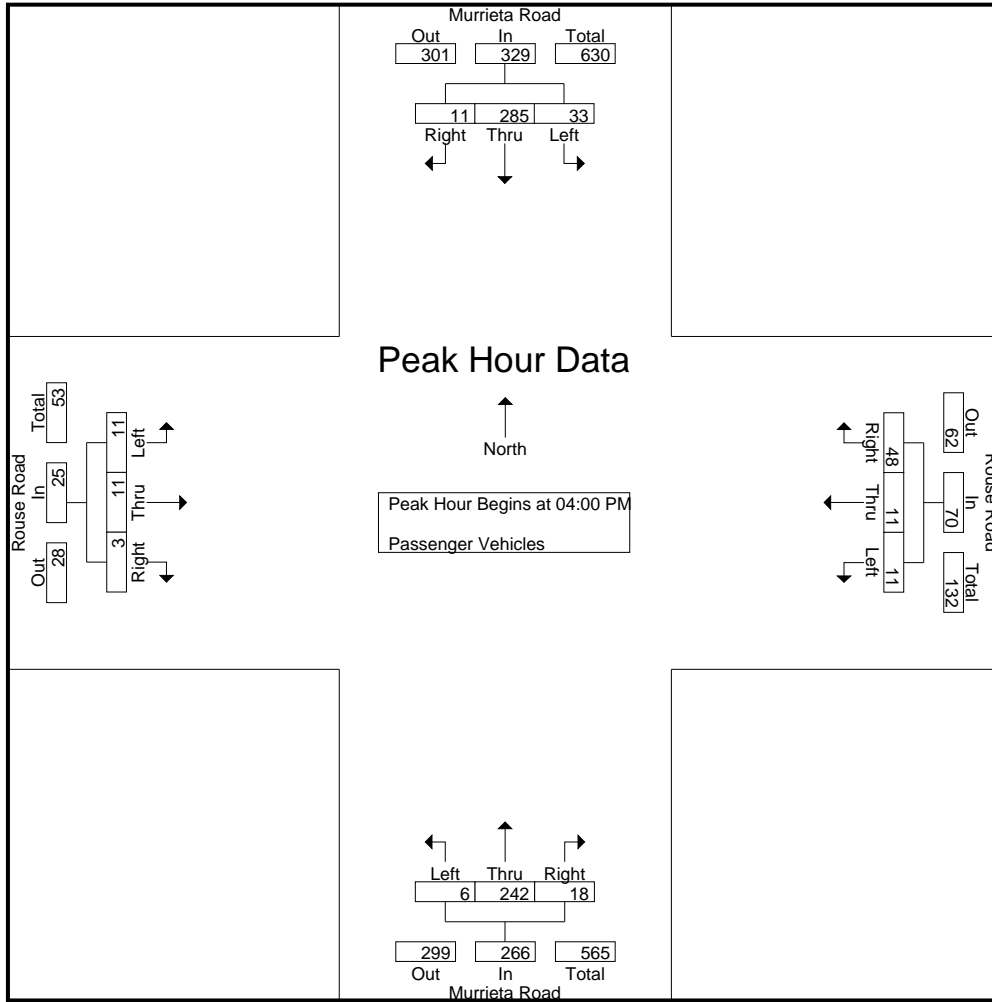
Start Time	Murrieta Road Southbound				Rouse Road Westbound				Murrieta Road Northbound				Rouse Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	8	63	1	72	5	1	13	19	2	69	5	76	2	2	1	5	172
04:15 PM	8	77	2	87	0	2	10	12	1	59	5	65	2	3	0	5	169
04:30 PM	7	80	5	92	5	3	15	23	0	54	6	60	5	4	1	10	185
04:45 PM	10	65	3	78	1	5	10	16	3	60	2	65	2	2	1	5	164
Total	33	285	11	329	11	11	48	70	6	242	18	266	11	11	3	25	690
05:00 PM	9	68	8	85	5	6	11	22	0	43	3	46	6	3	0	9	162
05:15 PM	15	80	6	101	2	1	13	16	1	48	2	51	4	1	2	7	175
05:30 PM	7	56	5	68	5	1	9	15	0	39	5	44	0	3	1	4	131
05:45 PM	7	51	4	62	4	2	10	16	0	41	1	42	1	1	0	2	122
Total	38	255	23	316	16	10	43	69	1	171	11	183	11	8	3	22	590
Grand Total	71	540	34	645	27	21	91	139	7	413	29	449	22	19	6	47	1280
Apprch %	11	83.7	5.3		19.4	15.1	65.5		1.6	92	6.5		46.8	40.4	12.8		
Total %	5.5	42.2	2.7	50.4	2.1	1.6	7.1	10.9	0.5	32.3	2.3	35.1	1.7	1.5	0.5	3.7	

Start Time	Murrieta Road Southbound				Rouse Road Westbound				Murrieta Road Northbound				Rouse Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	8	63	1	72	5	1	13	19	2	69	5	76	2	2	1	5	172
04:15 PM	8	77	2	87	0	2	10	12	1	59	5	65	2	3	0	5	169
04:30 PM	7	80	5	92	5	3	15	23	0	54	6	60	5	4	1	10	185
04:45 PM	10	65	3	78	1	5	10	16	3	60	2	65	2	2	1	5	164
Total Volume	33	285	11	329	11	11	48	70	6	242	18	266	11	11	3	25	690
% App. Total	10	86.6	3.3		15.7	15.7	68.6		2.3	91	6.8		44	44	12		
PHF	.825	.891	.550	.894	.550	.550	.800	.761	.500	.877	.750	.875	.550	.688	.750	.625	.932

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

City of Menifee
 N/S: Murrieta Road
 E/W: Rouse Road
 Weather: Clear

File Name : 03_MEN_Rouse_McLaughlin PM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 2



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

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	8	63	1	72	5	1	13	19	2	69	5	76	2	2	1	5
+15 mins.	8	77	2	87	0	2	10	12	1	59	5	65	2	3	0	5
+30 mins.	7	80	5	92	5	3	15	23	0	54	6	60	5	4	1	10
+45 mins.	10	65	3	78	1	5	10	16	3	60	2	65	2	2	1	5
Total Volume	33	285	11	329	11	11	48	70	6	242	18	266	11	11	3	25
% App. Total	10	86.6	3.3		15.7	15.7	68.6		2.3	91	6.8		44	44	12	
PHF	.825	.891	.550	.894	.550	.550	.800	.761	.500	.877	.750	.875	.550	.688	.750	.625

City of Menifee
 N/S: Murrieta Road
 E/W: Rouse Road
 Weather: Clear

File Name : 03_MEN_Rouse_McLaughlin PM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

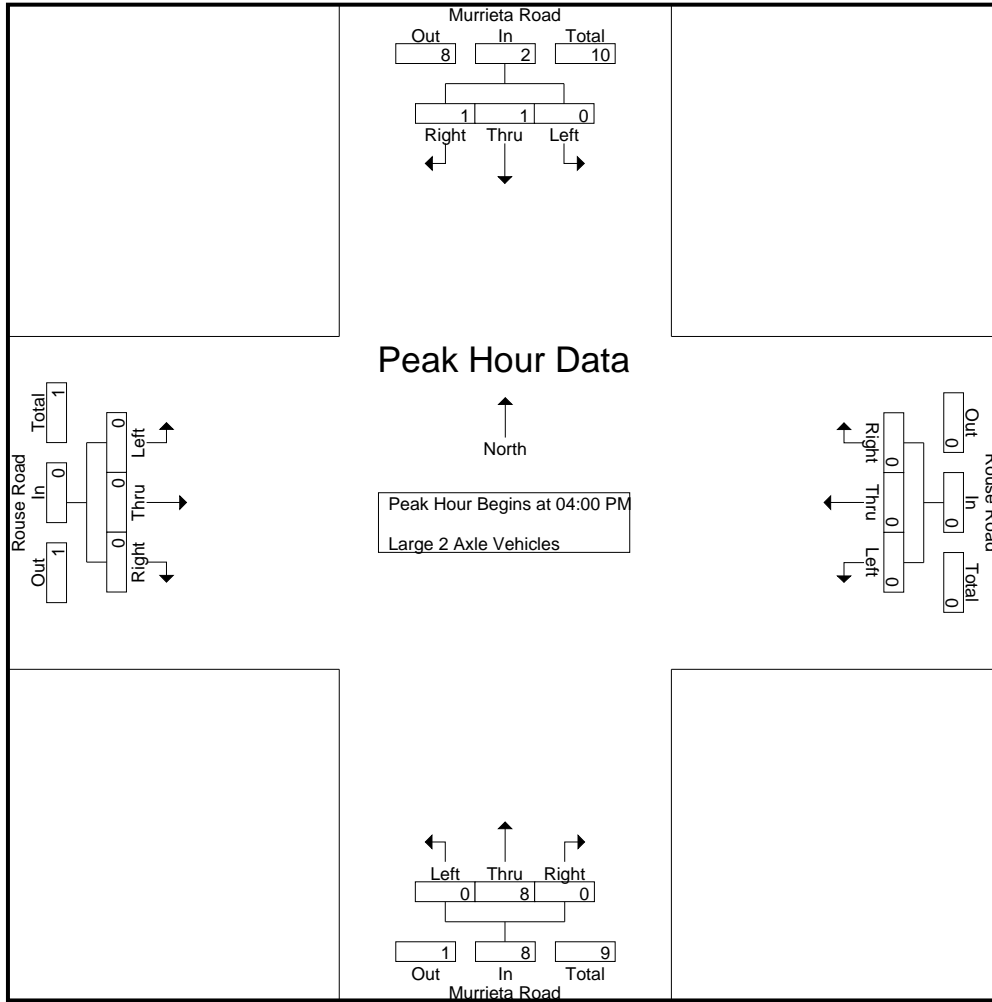
Start Time	Murrieta Road Southbound				Rouse Road Westbound				Murrieta Road Northbound				Rouse Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	4	0	4	0	0	0	0	4
04:15 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
04:45 PM	0	1	0	1	0	0	0	0	0	3	0	3	0	0	0	0	4
Total	0	1	1	2	0	0	0	0	0	8	0	8	0	0	0	0	10
05:00 PM	0	1	0	1	0	0	2	2	0	0	0	0	1	0	0	1	4
05:15 PM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
05:30 PM	0	1	0	1	1	0	1	2	0	0	0	0	0	0	0	0	3
05:45 PM	0	2	0	2	0	0	0	0	0	0	1	1	0	0	0	0	3
Total	0	6	0	6	1	0	3	4	0	1	1	2	1	0	0	1	13
Grand Total	0	7	1	8	1	0	3	4	0	9	1	10	1	0	0	1	23
Apprch %	0	87.5	12.5		25	0	75		0	90	10		100	0	0		
Total %	0	30.4	4.3	34.8	4.3	0	13	17.4	0	39.1	4.3	43.5	4.3	0	0	4.3	

Start Time	Murrieta Road Southbound				Rouse Road Westbound				Murrieta Road Northbound				Rouse Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	4	0	4	0	0	0	0	4
04:15 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
04:45 PM	0	1	0	1	0	0	0	0	0	3	0	3	0	0	0	0	4
Total Volume	0	1	1	2	0	0	0	0	0	8	0	8	0	0	0	0	10
% App. Total	0	50	50		0	0	0		0	100	0		0	0	0		
PHF	.000	.250	.250	.500	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.625

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

City of Menifee
 N/S: Murrieta Road
 E/W: Rouse Road
 Weather: Clear

File Name : 03_MEN_Rouse_McLaughlin PM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 2



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

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	4	0	4	0	0	0	0
+15 mins.	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
+45 mins.	0	1	0	1	0	0	0	0	0	3	0	3	0	0	0	0
Total Volume	0	1	1	2	0	0	0	0	0	8	0	8	0	0	0	0
% App. Total	0	50	50		0	0	0		0	100	0		0	0	0	
PHF	.000	.250	.250	.500	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000

City of Menifee
 N/S: Murrieta Road
 E/W: Rouse Road
 Weather: Clear

File Name : 03_MEN_Rouse_McLaughlin PM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Murrieta Road Southbound				Rouse Road Westbound				Murrieta Road Northbound				Rouse Road Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
04:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Grand Total	0	1	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	2
Apprch %	0	100	0		0	0	0		0	100	0		0	0	0			
Total %	0	50	0	50	0	0	0	0	0	50	0	50	0	0	0	0		

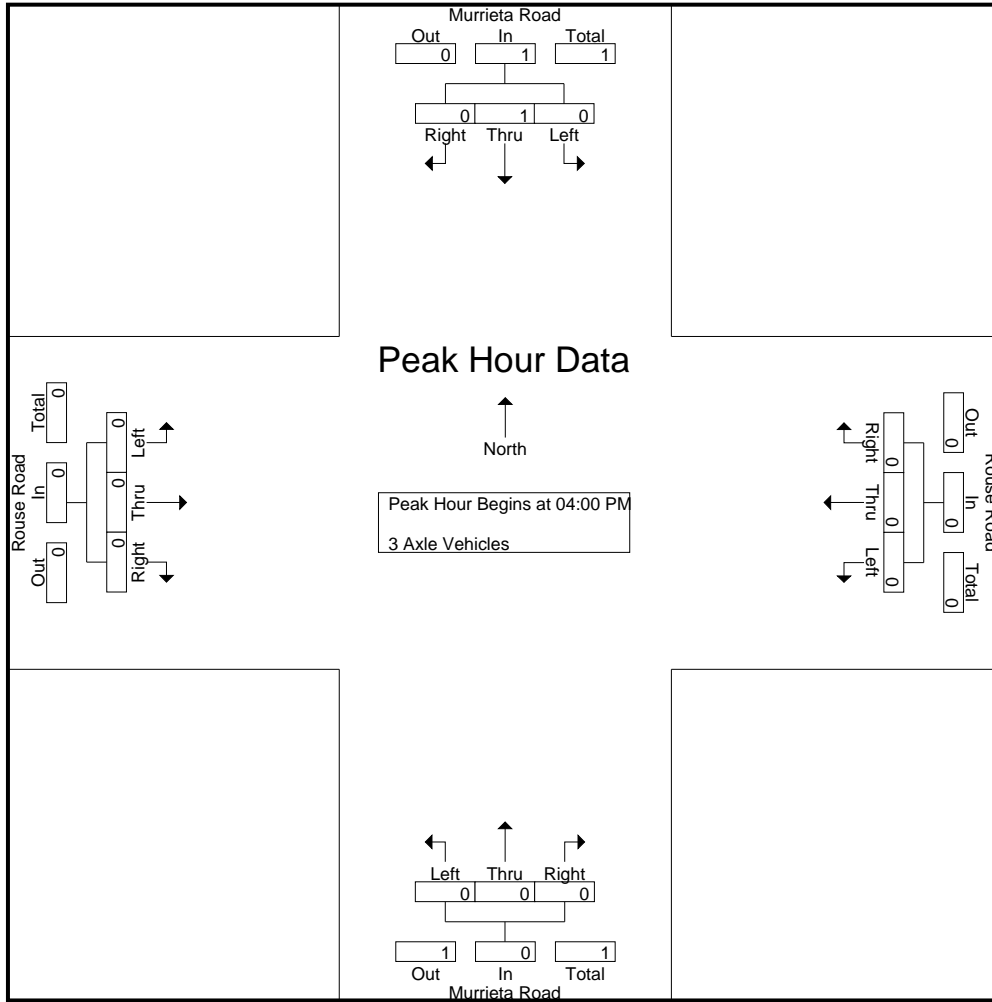
Start Time	Murrieta Road Southbound				Rouse Road Westbound				Murrieta Road Northbound				Rouse Road Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
04:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% App. Total	0	100	0		0	0	0		0	0	0		0	0	0			
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:00 PM

City of Menifee
 N/S: Murrieta Road
 E/W: Rouse Road
 Weather: Clear

File Name : 03_MEN_Rouse_McLaughlin PM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 2



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

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Menifee
 N/S: Murrieta Road
 E/W: Rouse Road
 Weather: Clear

File Name : 03_MEN_Rouse_McLaughlin PM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 1

Groups Printed- 4+ Axle Trucks

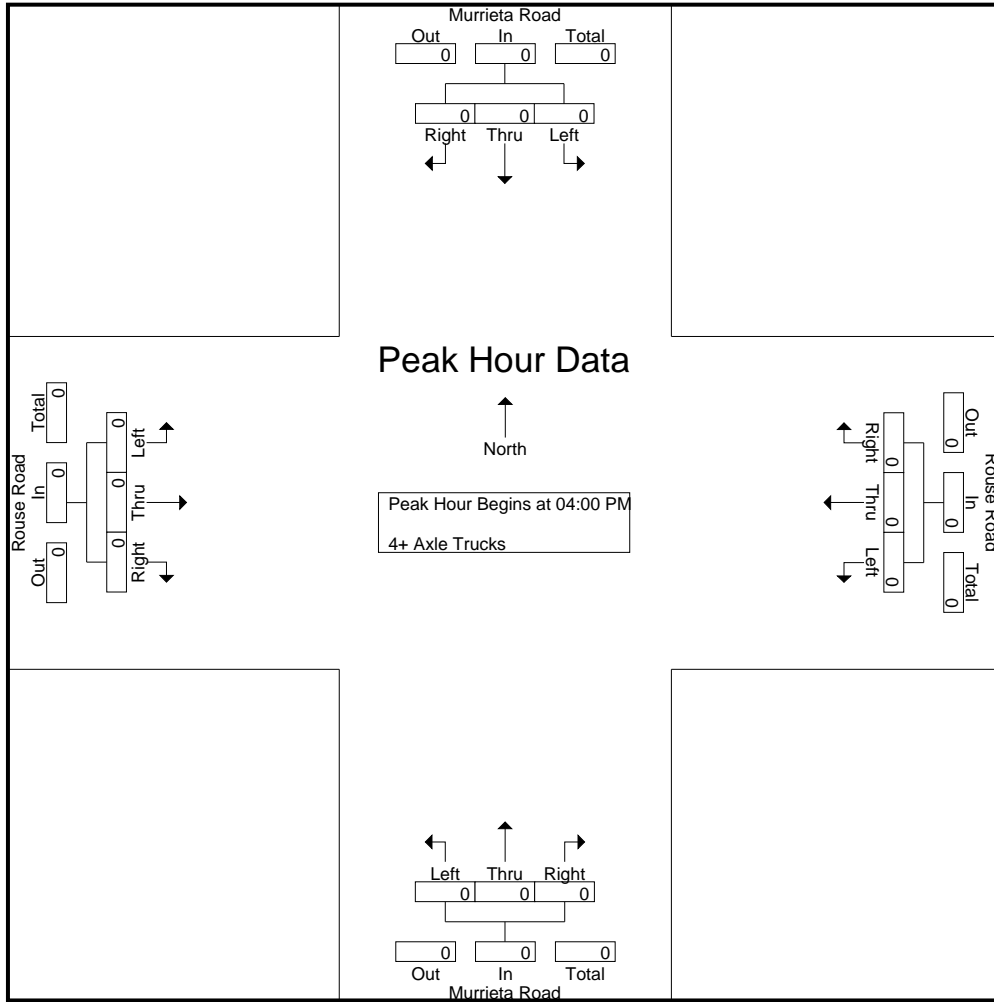
Start Time	Murrieta Road Southbound				Rouse Road Westbound				Murrieta Road Northbound				Rouse Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0		0	0	0		0	0	0		
Total %																	

Start Time	Murrieta Road Southbound				Rouse Road Westbound				Murrieta Road Northbound				Rouse Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

City of Menifee
 N/S: Murrieta Road
 E/W: Rouse Road
 Weather: Clear

File Name : 03_MEN_Rouse_McLaughlin PM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 2



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

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
1/22/19
TUESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

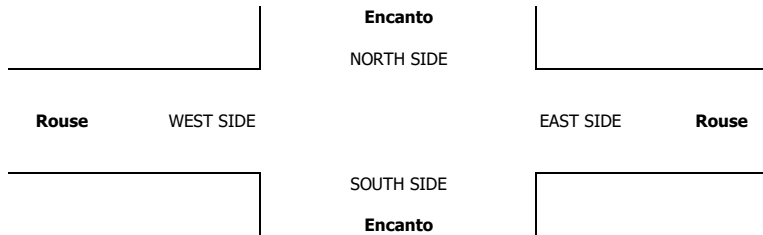
Menifee
Encanto
Rouse

PROJECT #: SC2048
LOCATION #: 26
CONTROL: STOP W

PCE Adjusted	NOTES:										AM PM MD OTHER OTHER	▲ N ◀ W S ▼	▶ E
	Class	1	2	3	4	5	6	7	8	9			
	Factor	1	1.5	2	3	2	2	2	2	2			

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			U-TURNS							
	NL X	Encanto NT 1		NR 0	SL 0	Encanto ST 1		SR X	EL X	ET X	ER X	WL 0	Rouse WT X		WR 0	TOTAL	NB	SB	EB	WB

AM	7:00 AM	0	13	2	0	12	0	0	0	0	36	0	9	72						0
	7:15 AM	0	10	13	7	17	0	0	0	0	33	0	7	86						0
	7:30 AM	0	31	18	2	24	0	0	0	0	37	0	10	120						0
	7:45 AM	0	62	18	4	48	0	0	0	0	19	0	11	161						0
	8:00 AM	0	49	15	2	43	0	0	0	0	10	0	6	124						0
	8:15 AM	0	28	7	6	34	0	0	0	0	20	0	6	100						0
	8:30 AM	0	23	5	0	24	0	0	0	0	6	0	5	63						0
	8:45 AM	0	19	7	4	11	0	0	0	0	13	0	4	57						0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0						0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0						0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0						0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0						0
	VOLUMES	0	234	84	24	212	0	0	0	0	171	0	57	781	0	0	0	0	0	0
APPROACH %	0%	74%	26%	10%	90%	0%	0%	0%	0%	75%	0%	25%		0	0	0	0	0	0	
APP/DEPART	317	/	290	236	/	383	0	/	108	228	/	0	0	0	0	0	0	0	0	
BEGIN PEAK HR	7:30 AM																			
VOLUMES	0	170	57	13	149	0	0	0	0	85	0	32	504	0	0	0	0	0	0	
APPROACH %	0%	75%	25%	8%	92%	0%	0%	0%	0%	73%	0%	27%		0	0	0	0	0	0	
PEAK HR FACTOR	0.712																			
APP/DEPART	227	/	201	162	/	233	0	/	70	116	/	0	0	0	0	0	0	0	0	
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0						0	
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0						0	
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0						0	
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0						0	
	4:00 PM	0	24	25	2	26	0	0	0	0	9	0	4	88						0
	4:15 PM	0	22	7	6	27	0	0	0	0	15	0	5	81						0
	4:30 PM	0	18	25	4	27	0	0	0	0	9	0	3	86						0
	4:45 PM	0	21	12	4	36	0	0	0	0	8	0	2	83						0
	5:00 PM	0	26	15	5	19	0	0	0	0	7	0	6	77						0
	5:15 PM	0	20	23	6	38	0	0	0	0	9	0	3	98						0
	5:30 PM	0	18	21	4	22	0	0	0	0	10	0	5	79						0
	5:45 PM	0	19	22	3	20	0	0	0	0	5	0	4	72						0
	VOLUMES	0	166	149	33	213	0	0	0	0	71	0	31	662	0	0	0	0	0	0
APPROACH %	0%	53%	47%	13%	87%	0%	0%	0%	0%	69%	0%	31%		0	0	0	0	0	0	
APP/DEPART	315	/	197	246	/	284	0	/	182	102	/	0	0	0	0	0	0	0	0	
BEGIN PEAK HR	4:30 PM																			
VOLUMES	0	85	75	18	119	0	0	0	0	33	0	14	343	0	0	0	0	0	0	
APPROACH %	0%	53%	47%	13%	87%	0%	0%	0%	0%	70%	0%	30%		0	0	0	0	0	0	
PEAK HR FACTOR	0.924																			
APP/DEPART	159	/	99	137	/	152	0	/	93	47	/	0	0	0	0	0	0	0	0	



City of Menifee
 N/S: Bradley Road
 E/W: McCall Boulevard
 Weather: Clear

File Name : 04_MEN_Bradley_McCall AM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 1

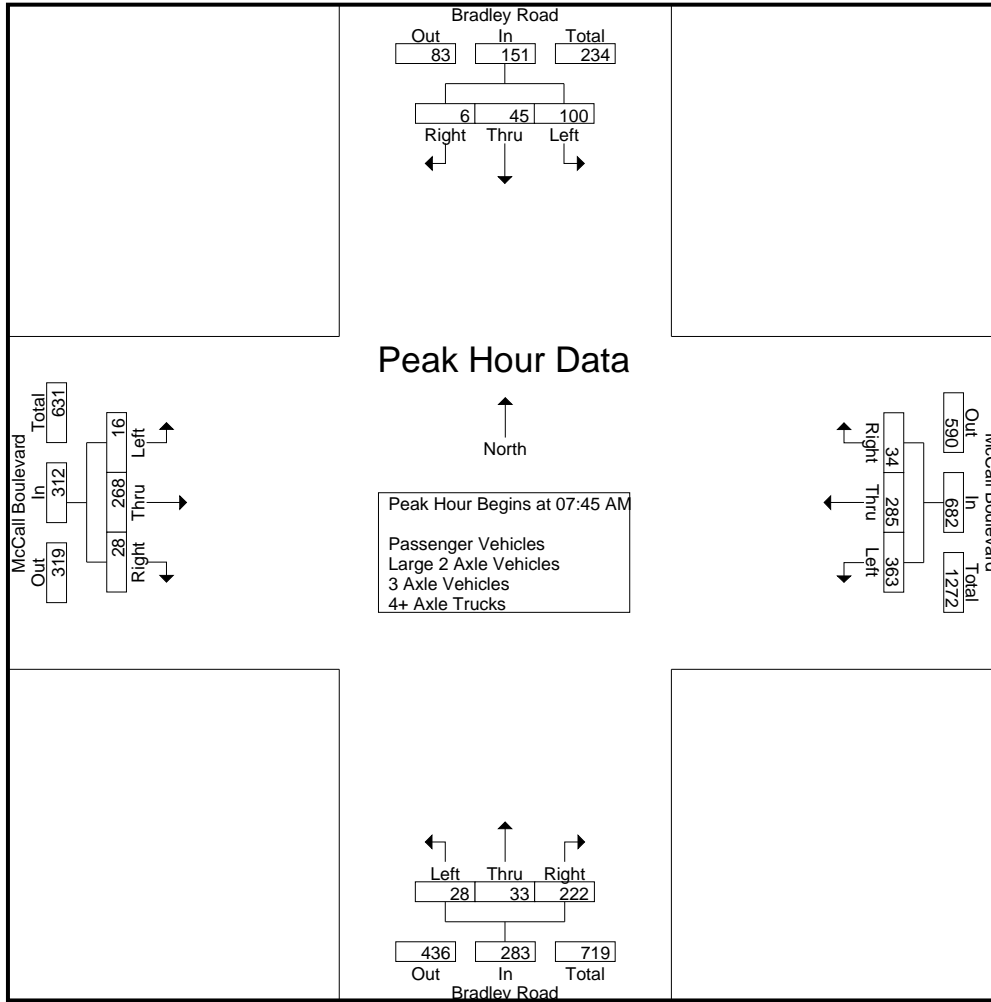
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Bradley Road Southbound				McCall Boulevard Westbound				Bradley Road Northbound				McCall Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	24	3	1	28	32	59	8	99	3	5	43	51	0	75	8	83	261
07:15 AM	31	8	1	40	37	51	4	92	4	2	45	51	1	74	7	82	265
07:30 AM	42	4	0	46	62	59	4	125	8	4	43	55	2	76	3	81	307
07:45 AM	21	16	1	38	123	78	16	217	8	6	61	75	4	69	3	76	406
Total	118	31	3	152	254	247	32	533	23	17	192	232	7	294	21	322	1239
08:00 AM	23	5	1	29	65	64	7	136	5	9	59	73	2	55	6	63	301
08:15 AM	20	10	3	33	84	60	5	149	9	10	56	75	8	77	5	90	347
08:30 AM	36	14	1	51	91	83	6	180	6	8	46	60	2	67	14	83	374
08:45 AM	27	7	2	36	90	81	13	184	7	11	63	81	5	53	4	62	363
Total	106	36	7	149	330	288	31	649	27	38	224	289	17	252	29	298	1385
Grand Total	224	67	10	301	584	535	63	1182	50	55	416	521	24	546	50	620	2624
Apprch %	74.4	22.3	3.3		49.4	45.3	5.3		9.6	10.6	79.8		3.9	88.1	8.1		
Total %	8.5	2.6	0.4	11.5	22.3	20.4	2.4	45	1.9	2.1	15.9	19.9	0.9	20.8	1.9	23.6	
Passenger Vehicles	216	62	7	285	567	513	59	1139	47	50	405	502	21	525	47	593	2519
% Passenger Vehicles	96.4	92.5	70	94.7	97.1	95.9	93.7	96.4	94	90.9	97.4	96.4	87.5	96.2	94	95.6	96
Large 2 Axle Vehicles	7	5	2	14	14	17	3	34	3	2	8	13	1	10	3	14	75
% Large 2 Axle Vehicles	3.1	7.5	20	4.7	2.4	3.2	4.8	2.9	6	3.6	1.9	2.5	4.2	1.8	6	2.3	2.9
3 Axle Vehicles	0	0	1	1	3	2	1	6	0	3	2	5	2	5	0	7	19
% 3 Axle Vehicles	0	0	10	0.3	0.5	0.4	1.6	0.5	0	5.5	0.5	1	8.3	0.9	0	1.1	0.7
4+ Axle Trucks	1	0	0	1	0	3	0	3	0	0	1	1	0	6	0	6	11
% 4+ Axle Trucks	0.4	0	0	0.3	0	0.6	0	0.3	0	0	0.2	0.2	0	1.1	0	1	0.4

Start Time	Bradley Road Southbound				McCall Boulevard Westbound				Bradley Road Northbound				McCall Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	21	16	1	38	123	78	16	217	8	6	61	75	4	69	3	76	406
08:00 AM	23	5	1	29	65	64	7	136	5	9	59	73	2	55	6	63	301
08:15 AM	20	10	3	33	84	60	5	149	9	10	56	75	8	77	5	90	347
08:30 AM	36	14	1	51	91	83	6	180	6	8	46	60	2	67	14	83	374
Total Volume	100	45	6	151	363	285	34	682	28	33	222	283	16	268	28	312	1428
% App. Total	66.2	29.8	4		53.2	41.8	5		9.9	11.7	78.4		5.1	85.9	9		
PHF	.694	.703	.500	.740	.738	.858	.531	.786	.778	.825	.910	.943	.500	.870	.500	.867	.879

City of Menifee
 N/S: Bradley Road
 E/W: McCall Boulevard
 Weather: Clear

File Name : 04_MEN_Bradley_McCall AM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 2



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

	07:15 AM				07:45 AM				08:00 AM				07:00 AM			
+0 mins.	31	8	1	40	123	78	16	217	5	9	59	73	0	75	8	83
+15 mins.	42	4	0	46	65	64	7	136	9	10	56	75	1	74	7	82
+30 mins.	21	16	1	38	84	60	5	149	6	8	46	60	2	76	3	81
+45 mins.	23	5	1	29	91	83	6	180	7	11	63	81	4	69	3	76
Total Volume	117	33	3	153	363	285	34	682	27	38	224	289	7	294	21	322
% App. Total	76.5	21.6	2		53.2	41.8	5		9.3	13.1	77.5		2.2	91.3	6.5	
PHF	.696	.516	.750	.832	.738	.858	.531	.786	.750	.864	.889	.892	.438	.967	.656	.970

City of Menifee
 N/S: Bradley Road
 E/W: McCall Boulevard
 Weather: Clear

File Name : 04_MEN_Bradley_McCall AM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	Bradley Road Southbound				McCall Boulevard Westbound				Bradley Road Northbound				McCall Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	24	2	1	27	30	58	8	96	3	4	41	48	0	71	8	79	250
07:15 AM	31	6	1	38	35	47	4	86	4	2	45	51	1	69	7	77	252
07:30 AM	39	4	0	43	60	57	4	121	8	3	41	52	1	72	3	76	292
07:45 AM	21	16	1	38	120	75	13	208	8	5	58	71	4	68	2	74	391
Total	115	28	3	146	245	237	29	511	23	14	185	222	6	280	20	306	1185
08:00 AM	21	4	0	25	65	62	7	134	5	9	58	72	2	54	6	62	293
08:15 AM	19	10	1	30	81	55	5	141	8	10	55	73	7	74	5	86	330
08:30 AM	35	13	1	49	90	81	6	177	5	7	44	56	2	65	13	80	362
08:45 AM	26	7	2	35	86	78	12	176	6	10	63	79	4	52	3	59	349
Total	101	34	4	139	322	276	30	628	24	36	220	280	15	245	27	287	1334
Grand Total	216	62	7	285	567	513	59	1139	47	50	405	502	21	525	47	593	2519
Apprch %	75.8	21.8	2.5		49.8	45	5.2		9.4	10	80.7		3.5	88.5	7.9		
Total %	8.6	2.5	0.3	11.3	22.5	20.4	2.3	45.2	1.9	2	16.1	19.9	0.8	20.8	1.9	23.5	

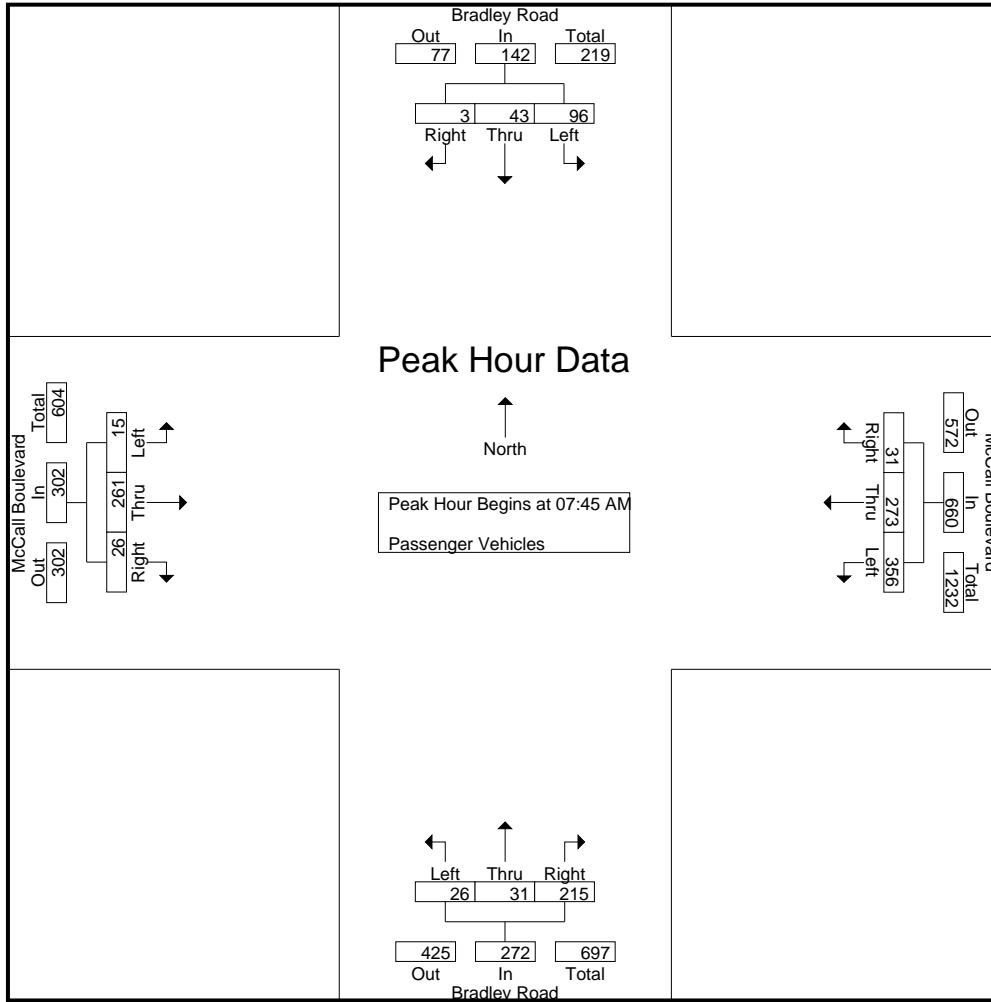
Start Time	Bradley Road Southbound				McCall Boulevard Westbound				Bradley Road Northbound				McCall Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:45 AM	21	16	1	38	120	75	13	208	8	5	58	71	4	68	2	74	391
08:00 AM	21	4	0	25	65	62	7	134	5	9	58	72	2	54	6	62	293
08:15 AM	19	10	1	30	81	55	5	141	8	10	55	73	7	74	5	86	330
08:30 AM	35	13	1	49	90	81	6	177	5	7	44	56	2	65	13	80	362
Total Volume	96	43	3	142	356	273	31	660	26	31	215	272	15	261	26	302	1376
% App. Total	67.6	30.3	2.1		53.9	41.4	4.7		9.6	11.4	79		5	86.4	8.6		
PHF	.686	.672	.750	.724	.742	.843	.596	.793	.813	.775	.927	.932	.536	.882	.500	.878	.880

Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:45 AM

City of Menifee
 N/S: Bradley Road
 E/W: McCall Boulevard
 Weather: Clear

File Name : 04_MEN_Bradley_McCall AM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	21	16	1	38	120	75	13	208	8	5	58	71	4	68	2	74
+15 mins.	21	4	0	25	65	62	7	134	5	9	58	72	2	54	6	62
+30 mins.	19	10	1	30	81	55	5	141	8	10	55	73	7	74	5	86
+45 mins.	35	13	1	49	90	81	6	177	5	7	44	56	2	65	13	80
Total Volume	96	43	3	142	356	273	31	660	26	31	215	272	15	261	26	302
% App. Total	67.6	30.3	2.1		53.9	41.4	4.7		9.6	11.4	79		5	86.4	8.6	
PHF	.686	.672	.750	.724	.742	.843	.596	.793	.813	.775	.927	.932	.536	.882	.500	.878

City of Menifee
 N/S: Bradley Road
 E/W: McCall Boulevard
 Weather: Clear

File Name : 04_MEN_Bradley_McCall AM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Bradley Road Southbound				McCall Boulevard Westbound				Bradley Road Northbound				McCall Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	1	0	1	2	1	0	3	0	1	1	2	0	1	0	1	7
07:15 AM	0	2	0	2	2	3	0	5	0	0	0	0	0	2	0	2	9
07:30 AM	2	0	0	2	1	1	0	2	0	0	1	1	1	3	0	4	9
07:45 AM	0	0	0	0	3	3	2	8	0	1	3	4	0	0	1	1	13
Total	2	3	0	5	8	8	2	18	0	2	5	7	1	6	1	8	38
08:00 AM	2	1	1	4	0	1	0	1	0	0	1	1	0	1	0	1	7
08:15 AM	1	0	1	2	2	4	0	6	1	0	1	2	0	2	0	2	12
08:30 AM	1	1	0	2	1	2	0	3	1	0	1	2	0	0	1	1	8
08:45 AM	1	0	0	1	3	2	1	6	1	0	0	1	0	1	1	2	10
Total	5	2	2	9	6	9	1	16	3	0	3	6	0	4	2	6	37
Grand Total	7	5	2	14	14	17	3	34	3	2	8	13	1	10	3	14	75
Apprch %	50	35.7	14.3		41.2	50	8.8		23.1	15.4	61.5		7.1	71.4	21.4		
Total %	9.3	6.7	2.7	18.7	18.7	22.7	4	45.3	4	2.7	10.7	17.3	1.3	13.3	4	18.7	

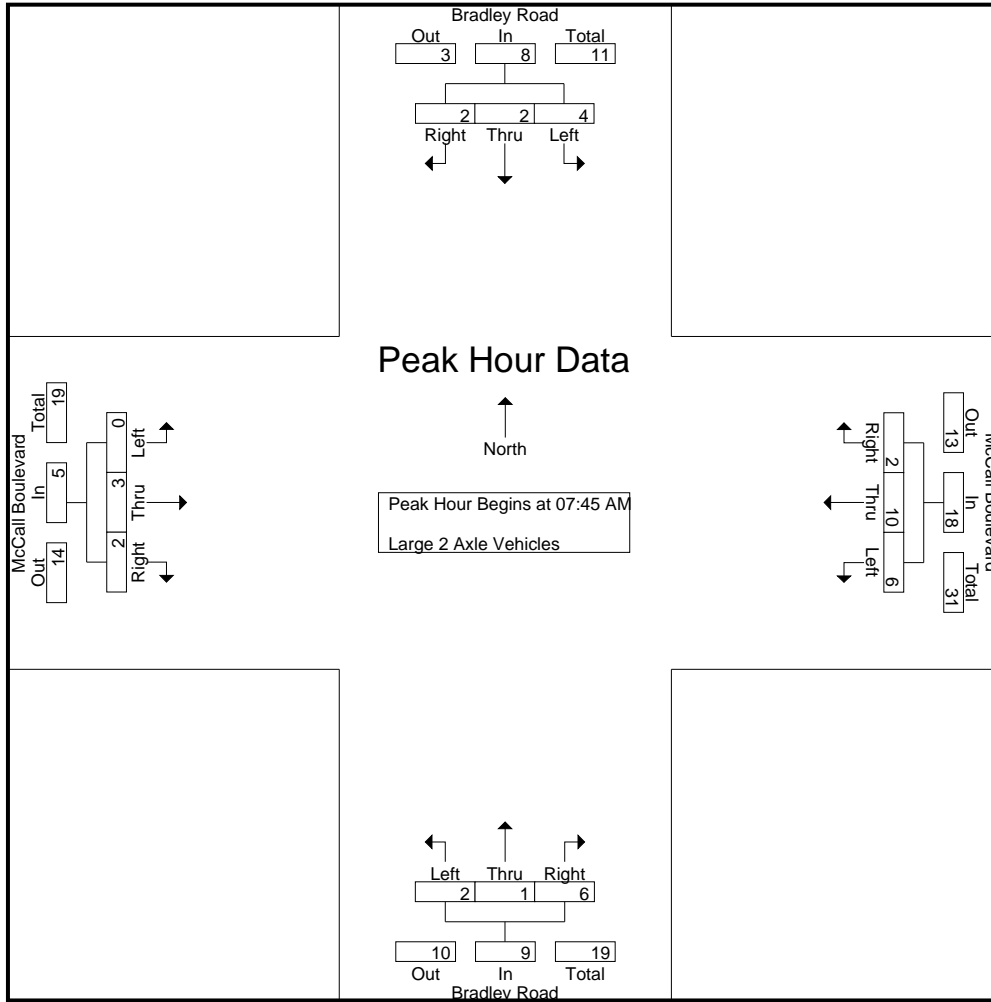
Start Time	Bradley Road Southbound				McCall Boulevard Westbound				Bradley Road Northbound				McCall Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:45 AM	0	0	0	0	3	3	2	8	0	1	3	4	0	0	1	1	13
08:00 AM	2	1	1	4	0	1	0	1	0	0	1	1	0	1	0	1	7
08:15 AM	1	0	1	2	2	4	0	6	1	0	1	2	0	2	0	2	12
08:30 AM	1	1	0	2	1	2	0	3	1	0	1	2	0	0	1	1	8
Total Volume	4	2	2	8	6	10	2	18	2	1	6	9	0	3	2	5	40
% App. Total	50	25	25		33.3	55.6	11.1		22.2	11.1	66.7		0	60	40		
PHF	.500	.500	.500	.500	.500	.625	.250	.563	.500	.250	.500	.563	.000	.375	.500	.625	.769

Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:45 AM

City of Menifee
 N/S: Bradley Road
 E/W: McCall Boulevard
 Weather: Clear

File Name : 04_MEN_Bradley_McCall AM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	0	0	0	0	3	3	2	8	0	1	3	4	0	0	1	1
+15 mins.	2	1	1	4	0	1	0	1	0	0	1	1	0	1	0	1
+30 mins.	1	0	1	2	2	4	0	6	1	0	1	2	0	2	0	2
+45 mins.	1	1	0	2	1	2	0	3	1	0	1	2	0	0	1	1
Total Volume	4	2	2	8	6	10	2	18	2	1	6	9	0	3	2	5
% App. Total	50	25	25		33.3	55.6	11.1		22.2	11.1	66.7		0	60	40	
PHF	.500	.500	.500	.500	.500	.625	.250	.563	.500	.250	.500	.563	.000	.375	.500	.625

City of Menifee
 N/S: Bradley Road
 E/W: McCall Boulevard
 Weather: Clear

File Name : 04_MEN_Bradley_McCall AM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Bradley Road Southbound				McCall Boulevard Westbound				Bradley Road Northbound				McCall Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	1	2
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	3
07:30 AM	0	0	0	0	1	0	0	1	0	1	0	1	0	0	0	0	2
07:45 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	1	0	1	2	0	1	1	2	0	4	0	4	8
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	1	1	1	1	0	2	0	0	0	0	1	0	0	1	4
08:30 AM	0	0	0	0	0	0	0	0	0	1	1	2	0	1	0	1	3
08:45 AM	0	0	0	0	1	1	0	2	0	1	0	1	1	0	0	1	4
Total	0	0	1	1	2	2	0	4	0	2	1	3	2	1	0	3	11
Grand Total	0	0	1	1	3	2	1	6	0	3	2	5	2	5	0	7	19
Apprch %	0	0	100		50	33.3	16.7		0	60	40		28.6	71.4	0		
Total %	0	0	5.3	5.3	15.8	10.5	5.3	31.6	0	15.8	10.5	26.3	10.5	26.3	0	36.8	

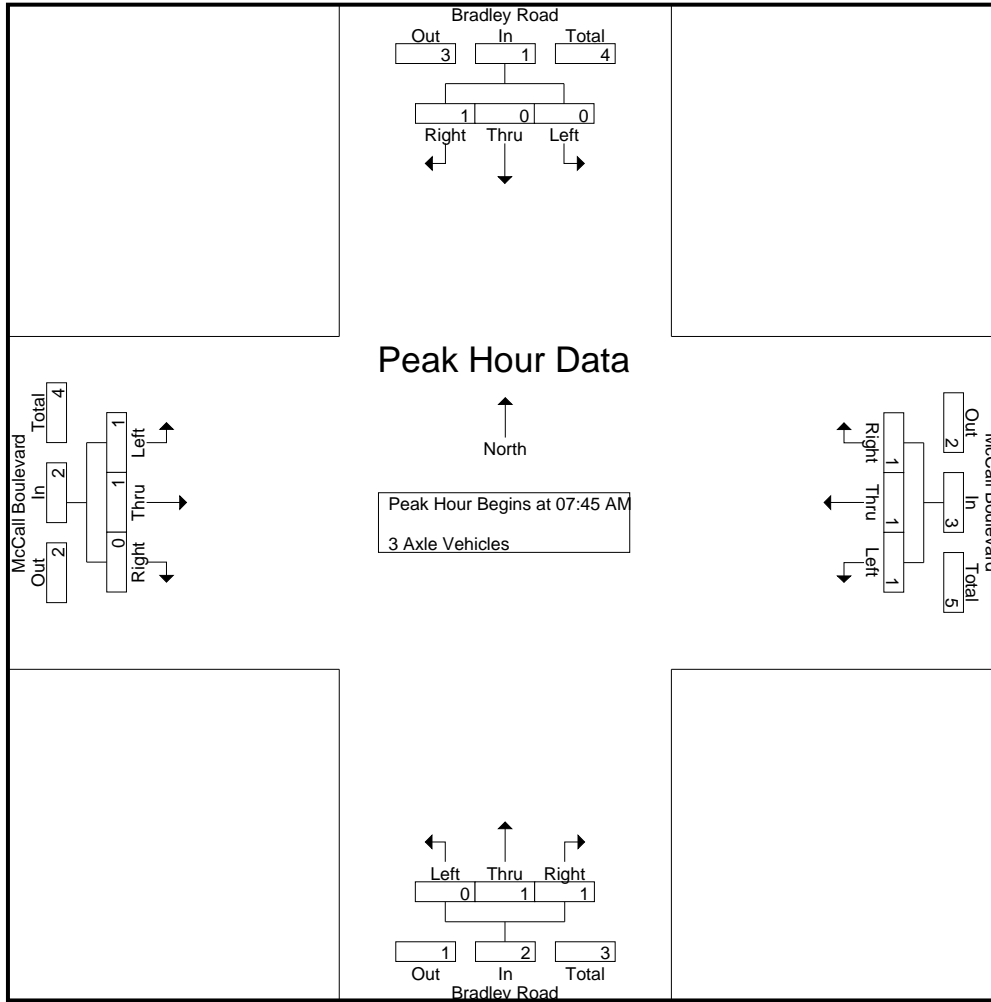
Start Time	Bradley Road Southbound				McCall Boulevard Westbound				Bradley Road Northbound				McCall Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:45 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	1	1	1	1	0	2	0	0	0	0	1	0	0	1	4
08:30 AM	0	0	0	0	0	0	0	0	0	1	1	2	0	1	0	1	3
Total Volume	0	0	1	1	1	1	1	3	0	1	1	2	1	1	0	2	8
% App. Total	0	0	100		33.3	33.3	33.3		0	50	50		50	50	0		
PHF	.000	.000	.250	.250	.250	.250	.250	.375	.000	.250	.250	.250	.250	.250	.000	.500	.500

Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:45 AM

City of Menifee
 N/S: Bradley Road
 E/W: McCall Boulevard
 Weather: Clear

File Name : 04_MEN_Bradley_McCall AM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	1	1	1	1	0	2	0	0	0	0	1	0	0	1
+45 mins.	0	0	0	0	0	0	0	0	0	1	1	2	0	1	0	1
Total Volume	0	0	1	1	1	1	1	3	0	1	1	2	1	1	0	2
% App. Total	0	0	100		33.3	33.3	33.3		0	50	50		50	50	0	
PHF	.000	.000	.250	.250	.250	.250	.250	.375	.000	.250	.250	.250	.250	.250	.000	.500

City of Menifee
 N/S: Bradley Road
 E/W: McCall Boulevard
 Weather: Clear

File Name : 04_MEN_Bradley_McCall AM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	Bradley Road Southbound				McCall Boulevard Westbound				Bradley Road Northbound				McCall Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
07:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
07:30 AM	1	0	0	1	0	1	0	1	0	0	1	1	0	1	0	1	4
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	1	0	0	1	0	2	0	2	0	0	1	1	0	4	0	4	8
08:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
Grand Total	1	0	0	1	0	3	0	3	0	0	1	1	0	6	0	6	11
Apprch %	100	0	0		0	100	0		0	0	100		0	100	0		
Total %	9.1	0	0	9.1	0	27.3	0	27.3	0	0	9.1	9.1	0	54.5	0	54.5	

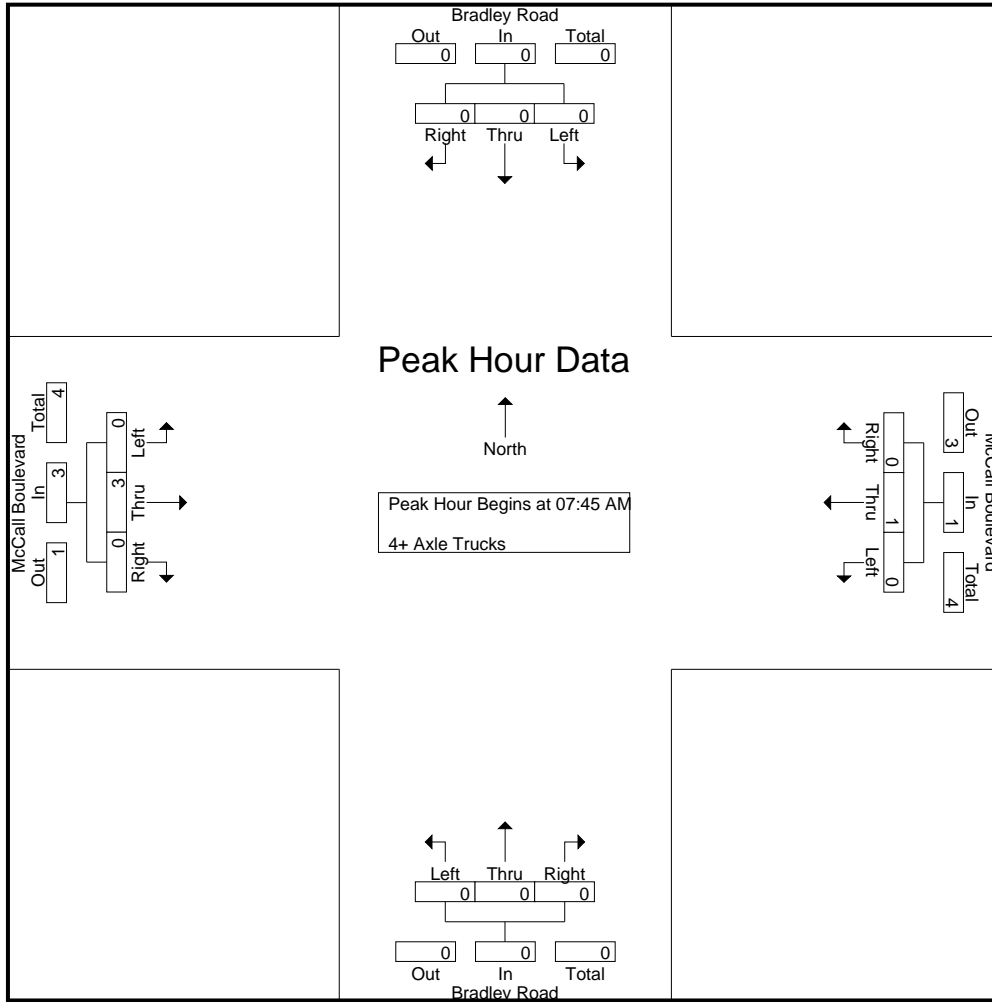
Start Time	Bradley Road Southbound				McCall Boulevard Westbound				Bradley Road Northbound				McCall Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.750	.000	.750	1.00

Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:45 AM

City of Menifee
 N/S: Bradley Road
 E/W: McCall Boulevard
 Weather: Clear

File Name : 04_MEN_Bradley_McCall AM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.750	.000	.750

City of Menifee
 N/S: Bradley Road
 E/W: McCall Boulevard
 Weather: Clear

File Name : 04_MEN_Bradley_McCall PM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 1

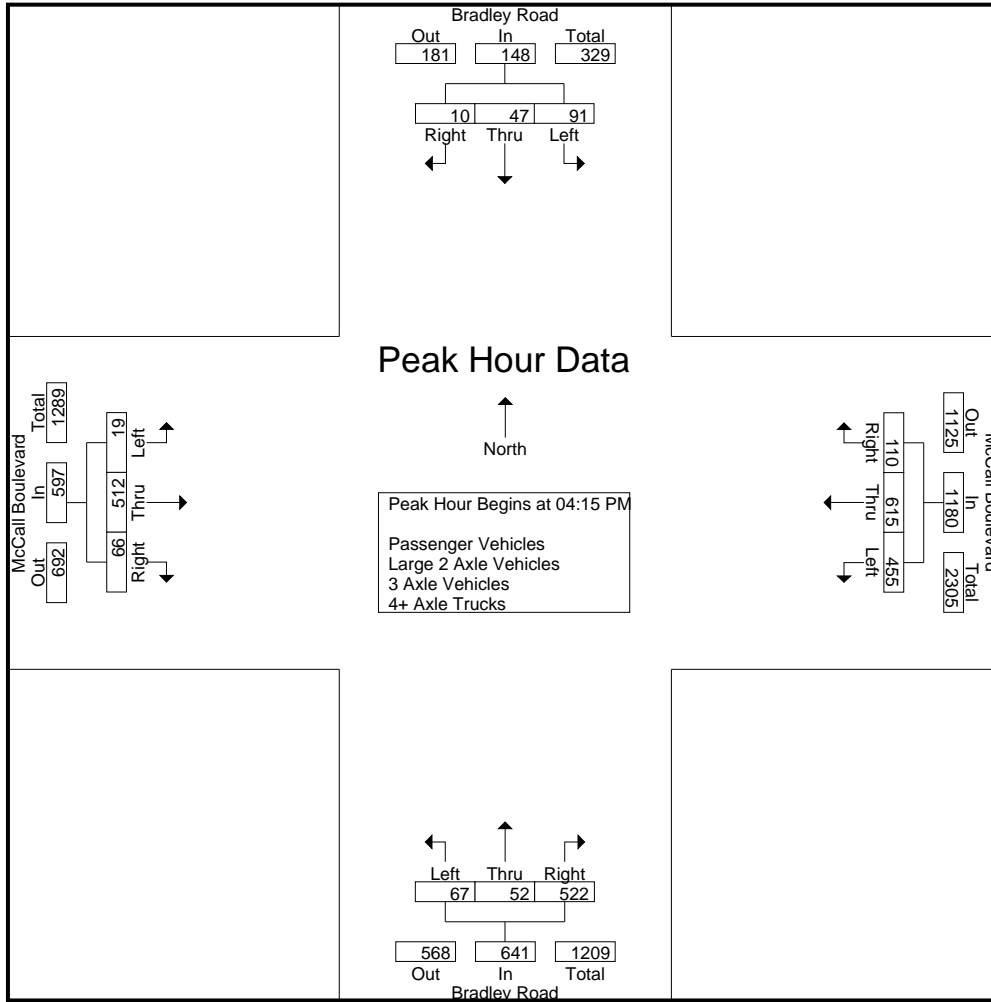
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Bradley Road Southbound				McCall Boulevard Westbound				Bradley Road Northbound				McCall Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	28	13	4	45	127	151	31	309	20	9	105	134	6	121	29	156	644
04:15 PM	21	15	4	40	116	158	28	302	16	18	121	155	3	123	19	145	642
04:30 PM	20	12	2	34	107	144	28	279	25	13	142	180	2	132	20	154	647
04:45 PM	29	10	2	41	113	149	23	285	15	9	121	145	6	115	9	130	601
Total	98	50	12	160	463	602	110	1175	76	49	489	614	17	491	77	585	2534
05:00 PM	21	10	2	33	119	164	31	314	11	12	138	161	8	142	18	168	676
05:15 PM	24	14	2	40	122	180	20	322	13	14	114	141	1	115	16	132	635
05:30 PM	30	15	5	50	99	135	18	252	14	9	79	102	4	104	24	132	536
05:45 PM	15	10	4	29	120	149	28	297	17	9	108	134	3	90	15	108	568
Total	90	49	13	152	460	628	97	1185	55	44	439	538	16	451	73	540	2415
Grand Total	188	99	25	312	923	1230	207	2360	131	93	928	1152	33	942	150	1125	4949
Apprch %	60.3	31.7	8		39.1	52.1	8.8		11.4	8.1	80.6		2.9	83.7	13.3		
Total %	3.8	2	0.5	6.3	18.7	24.9	4.2	47.7	2.6	1.9	18.8	23.3	0.7	19	3	22.7	
Passenger Vehicles	186	97	24	307	909	1218	205	2332	128	88	918	1134	33	918	147	1098	4871
% Passenger Vehicles	98.9	98	96	98.4	98.5	99	99	98.8	97.7	94.6	98.9	98.4	100	97.5	98	97.6	98.4
Large 2 Axle Vehicles	2	2	1	5	12	10	2	24	3	0	6	9	0	19	3	22	60
% Large 2 Axle Vehicles	1.1	2	4	1.6	1.3	0.8	1	1	2.3	0	0.6	0.8	0	2	2	2	1.2
3 Axle Vehicles	0	0	0	0	0	2	0	2	0	5	3	8	0	2	0	2	12
% 3 Axle Vehicles	0	0	0	0	0	0.2	0	0.1	0	5.4	0.3	0.7	0	0.2	0	0.2	0.2
4+ Axle Trucks	0	0	0	0	2	0	0	2	0	0	1	1	0	3	0	3	6
% 4+ Axle Trucks	0	0	0	0	0.2	0	0	0.1	0	0	0.1	0.1	0	0.3	0	0.3	0.1

Start Time	Bradley Road Southbound				McCall Boulevard Westbound				Bradley Road Northbound				McCall Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	21	15	4	40	116	158	28	302	16	18	121	155	3	123	19	145	642
04:30 PM	20	12	2	34	107	144	28	279	25	13	142	180	2	132	20	154	647
04:45 PM	29	10	2	41	113	149	23	285	15	9	121	145	6	115	9	130	601
05:00 PM	21	10	2	33	119	164	31	314	11	12	138	161	8	142	18	168	676
Total Volume	91	47	10	148	455	615	110	1180	67	52	522	641	19	512	66	597	2566
% App. Total	61.5	31.8	6.8		38.6	52.1	9.3		10.5	8.1	81.4		3.2	85.8	11.1		
PHF	.784	.783	.625	.902	.956	.938	.887	.939	.670	.722	.919	.890	.594	.901	.825	.888	.949

City of Menifee
 N/S: Bradley Road
 E/W: McCall Boulevard
 Weather: Clear

File Name : 04_MEN_Bradley_McCall PM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 2



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

	04:45 PM				04:30 PM				04:15 PM				04:15 PM			
+0 mins.	29	10	2	41	107	144	28	279	16	18	121	155	3	123	19	145
+15 mins.	21	10	2	33	113	149	23	285	25	13	142	180	2	132	20	154
+30 mins.	24	14	2	40	119	164	31	314	15	9	121	145	6	115	9	130
+45 mins.	30	15	5	50	122	180	20	322	11	12	138	161	8	142	18	168
Total Volume	104	49	11	164	461	637	102	1200	67	52	522	641	19	512	66	597
% App. Total	63.4	29.9	6.7		38.4	53.1	8.5		10.5	8.1	81.4		3.2	85.8	11.1	
PHF	.867	.817	.550	.820	.945	.885	.823	.932	.670	.722	.919	.890	.594	.901	.825	.888

City of Menifee
 N/S: Bradley Road
 E/W: McCall Boulevard
 Weather: Clear

File Name : 04_MEN_Bradley_McCall PM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 1

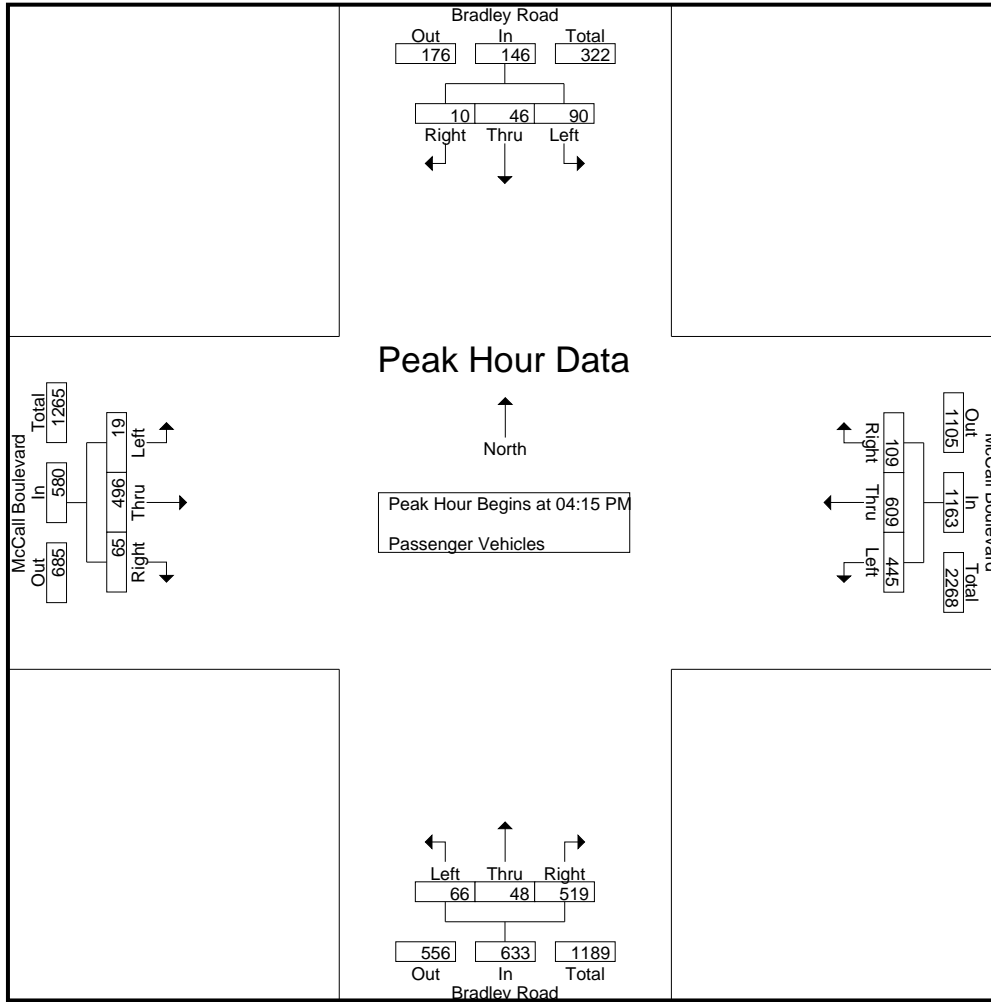
Groups Printed- Passenger Vehicles

Start Time	Bradley Road Southbound				McCall Boulevard Westbound				Bradley Road Northbound				McCall Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	28	12	3	43	125	149	31	305	19	8	103	130	6	118	28	152	630
04:15 PM	21	14	4	39	112	154	27	293	16	15	120	151	3	115	19	137	620
04:30 PM	20	12	2	34	105	142	28	275	25	13	142	180	2	129	19	150	639
04:45 PM	28	10	2	40	110	149	23	282	14	8	119	141	6	113	9	128	591
Total	97	48	11	156	452	594	109	1155	74	44	484	602	17	475	75	567	2480
05:00 PM	21	10	2	33	118	164	31	313	11	12	138	161	8	139	18	165	672
05:15 PM	24	14	2	40	121	179	20	320	13	14	114	141	1	113	15	129	630
05:30 PM	30	15	5	50	98	134	17	249	13	9	77	99	4	101	24	129	527
05:45 PM	14	10	4	28	120	147	28	295	17	9	105	131	3	90	15	108	562
Total	89	49	13	151	457	624	96	1177	54	44	434	532	16	443	72	531	2391
Grand Total	186	97	24	307	909	1218	205	2332	128	88	918	1134	33	918	147	1098	4871
Apprch %	60.6	31.6	7.8		39	52.2	8.8		11.3	7.8	81		3	83.6	13.4		
Total %	3.8	2	0.5	6.3	18.7	25	4.2	47.9	2.6	1.8	18.8	23.3	0.7	18.8	3	22.5	

Start Time	Bradley Road Southbound				McCall Boulevard Westbound				Bradley Road Northbound				McCall Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	21	14	4	39	112	154	27	293	16	15	120	151	3	115	19	137	620
04:30 PM	20	12	2	34	105	142	28	275	25	13	142	180	2	129	19	150	639
04:45 PM	28	10	2	40	110	149	23	282	14	8	119	141	6	113	9	128	591
05:00 PM	21	10	2	33	118	164	31	313	11	12	138	161	8	139	18	165	672
Total Volume	90	46	10	146	445	609	109	1163	66	48	519	633	19	496	65	580	2522
% App. Total	61.6	31.5	6.8		38.3	52.4	9.4		10.4	7.6	82		3.3	85.5	11.2		
PHF	.804	.821	.625	.913	.943	.928	.879	.929	.660	.800	.914	.879	.594	.892	.855	.879	.938

City of Menifee
 N/S: Bradley Road
 E/W: McCall Boulevard
 Weather: Clear

File Name : 04_MEN_Bradley_McCall PM
 Site Code : 06721006
 Start Date : 1/12/2021
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Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	21	14	4	39	112	154	27	293	16	15	120	151	3	115	19	137
+15 mins.	20	12	2	34	105	142	28	275	25	13	142	180	2	129	19	150
+30 mins.	28	10	2	40	110	149	23	282	14	8	119	141	6	113	9	128
+45 mins.	21	10	2	33	118	164	31	313	11	12	138	161	8	139	18	165
Total Volume	90	46	10	146	445	609	109	1163	66	48	519	633	19	496	65	580
% App. Total	61.6	31.5	6.8		38.3	52.4	9.4		10.4	7.6	82		3.3	85.5	11.2	
PHF	.804	.821	.625	.913	.943	.928	.879	.929	.660	.800	.914	.879	.594	.892	.855	.879

City of Menifee
 N/S: Bradley Road
 E/W: McCall Boulevard
 Weather: Clear

File Name : 04_MEN_Bradley_McCall PM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 1

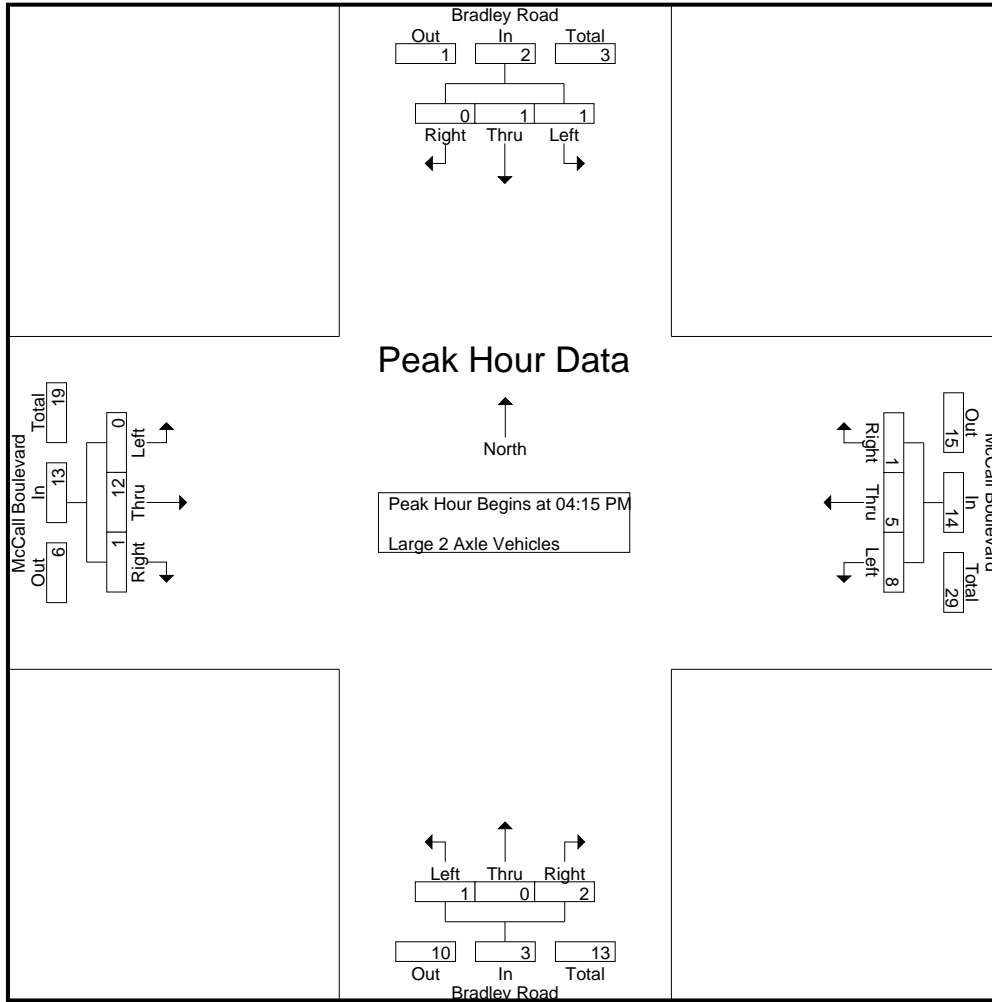
Groups Printed- Large 2 Axle Vehicles

Start Time	Bradley Road Southbound				McCall Boulevard Westbound				Bradley Road Northbound				McCall Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	1	1	2	2	1	0	3	1	0	1	2	0	3	1	4	11
04:15 PM	0	1	0	1	3	3	1	7	0	0	0	0	0	5	0	5	13
04:30 PM	0	0	0	0	2	2	0	4	0	0	0	0	0	3	1	4	8
04:45 PM	1	0	0	1	3	0	0	3	1	0	2	3	0	2	0	2	9
Total	1	2	1	4	10	6	1	17	2	0	3	5	0	13	2	15	41
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
05:15 PM	0	0	0	0	1	1	0	2	0	0	0	0	0	2	1	3	5
05:30 PM	0	0	0	0	1	1	1	3	1	0	1	2	0	2	0	2	7
05:45 PM	1	0	0	1	0	2	0	2	0	0	2	2	0	0	0	0	5
Total	1	0	0	1	2	4	1	7	1	0	3	4	0	6	1	7	19
Grand Total	2	2	1	5	12	10	2	24	3	0	6	9	0	19	3	22	60
Apprch %	40	40	20		50	41.7	8.3		33.3	0	66.7		0	86.4	13.6		
Total %	3.3	3.3	1.7	8.3	20	16.7	3.3	40	5	0	10	15	0	31.7	5	36.7	

Start Time	Bradley Road Southbound				McCall Boulevard Westbound				Bradley Road Northbound				McCall Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	1	0	1	3	3	1	7	0	0	0	0	0	5	0	5	13
04:30 PM	0	0	0	0	2	2	0	4	0	0	0	0	0	3	1	4	8
04:45 PM	1	0	0	1	3	0	0	3	1	0	2	3	0	2	0	2	9
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
Total Volume	1	1	0	2	8	5	1	14	1	0	2	3	0	12	1	13	32
% App. Total	50	50	0		57.1	35.7	7.1		33.3	0	66.7		0	92.3	7.7		
PHF	.250	.250	.000	.500	.667	.417	.250	.500	.250	.000	.250	.250	.000	.600	.250	.650	.615

City of Menifee
 N/S: Bradley Road
 E/W: McCall Boulevard
 Weather: Clear

File Name : 04_MEN_Bradley_McCall PM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 2



Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	1	0	1	3	3	1	7	0	0	0	0	0	5	0	5
+15 mins.	0	0	0	0	2	2	0	4	0	0	0	0	0	3	1	4
+30 mins.	1	0	0	1	3	0	0	3	1	0	2	3	0	2	0	2
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
Total Volume	1	1	0	2	8	5	1	14	1	0	2	3	0	12	1	13
% App. Total	50	50	0		57.1	35.7	7.1		33.3	0	66.7		0	92.3	7.7	
PHF	.250	.250	.000	.500	.667	.417	.250	.500	.250	.000	.250	.250	.000	.600	.250	.650

City of Menifee
 N/S: Bradley Road
 E/W: McCall Boulevard
 Weather: Clear

File Name : 04_MEN_Bradley_McCall PM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Bradley Road Southbound				McCall Boulevard Westbound				Bradley Road Northbound				McCall Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	1	0	1	0	1	1	2	0	0	0	0	0
04:15 PM	0	0	0	0	0	1	0	1	0	3	1	4	0	2	0	2	7
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	0	0	0	0	2	0	2	0	5	2	7	0	2	0	2	11
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
Grand Total	0	0	0	0	0	2	0	2	0	5	3	8	0	2	0	2	12
Apprch %	0	0	0	0	0	100	0	0	0	62.5	37.5	0	0	100	0	0	0
Total %	0	0	0	0	0	16.7	0	16.7	0	41.7	25	66.7	0	16.7	0	16.7	0

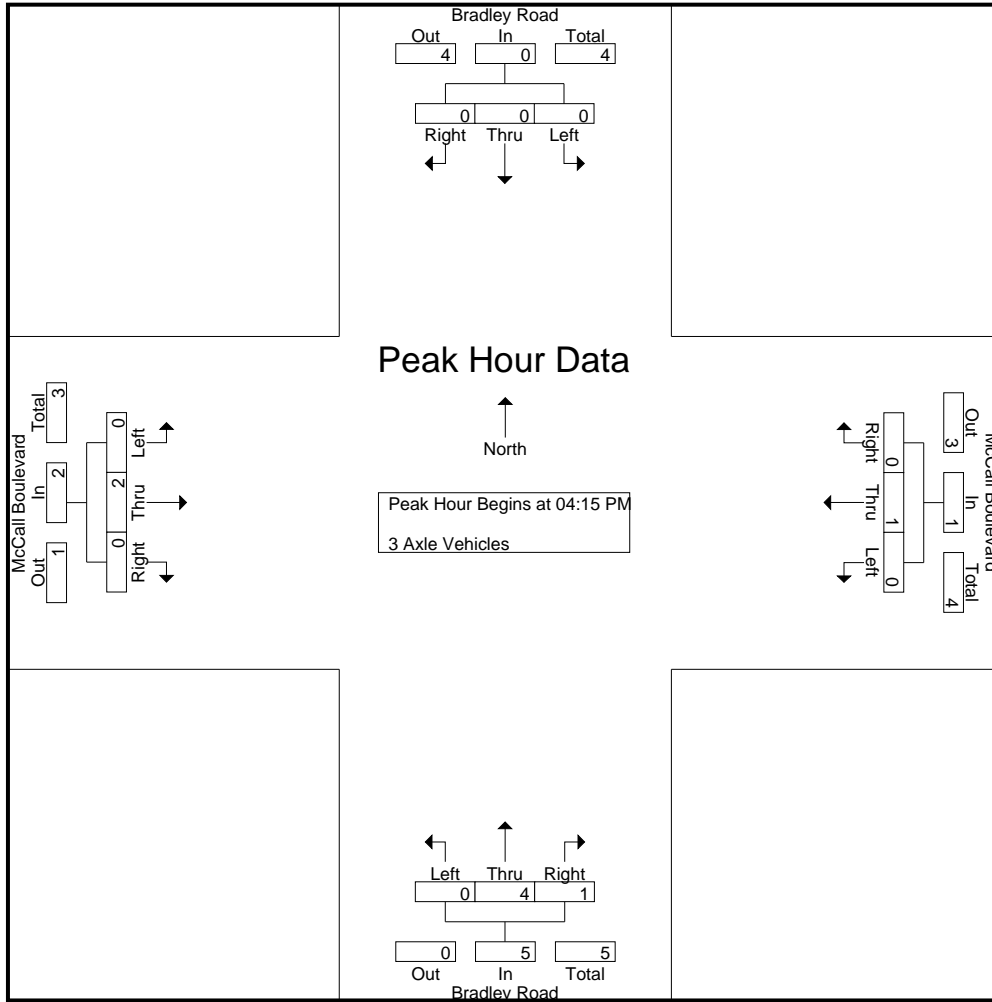
Start Time	Bradley Road Southbound				McCall Boulevard Westbound				Bradley Road Northbound				McCall Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:15 PM	0	0	0	0	0	1	0	1	0	3	1	4	0	2	0	2	7
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	1	0	1	0	4	1	5	0	2	0	2	8
% App. Total	0	0	0	0	0	100	0	0	0	80	20	0	0	100	0	0	0
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.333	.250	.313	.000	.250	.000	.250	.286

Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:15 PM

City of Menifee
 N/S: Bradley Road
 E/W: McCall Boulevard
 Weather: Clear

File Name : 04_MEN_Bradley_McCall PM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 2



Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	0	0	0	0	1	0	1	0	3	1	4	0	2	0	2
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	1	0	1	0	4	1	5	0	2	0	2
% App. Total	0	0	0	0	0	100	0	0	0	80	20	0	0	100	0	0
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.333	.250	.313	.000	.250	.000	.250

City of Menifee
 N/S: Bradley Road
 E/W: McCall Boulevard
 Weather: Clear

File Name : 04_MEN_Bradley_McCall PM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	Bradley Road Southbound				McCall Boulevard Westbound				Bradley Road Northbound				McCall Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	1	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	1	2
05:00 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	1	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
Total	0	0	0	0	1	0	0	1	0	0	1	1	0	2	0	2	4
Grand Total	0	0	0	0	2	0	0	2	0	0	1	1	0	3	0	3	6
Apprch %	0	0	0		100	0	0		0	0	100		0	100	0		
Total %	0	0	0	0	33.3	0	0	33.3	0	0	16.7	16.7	0	50	0	50	

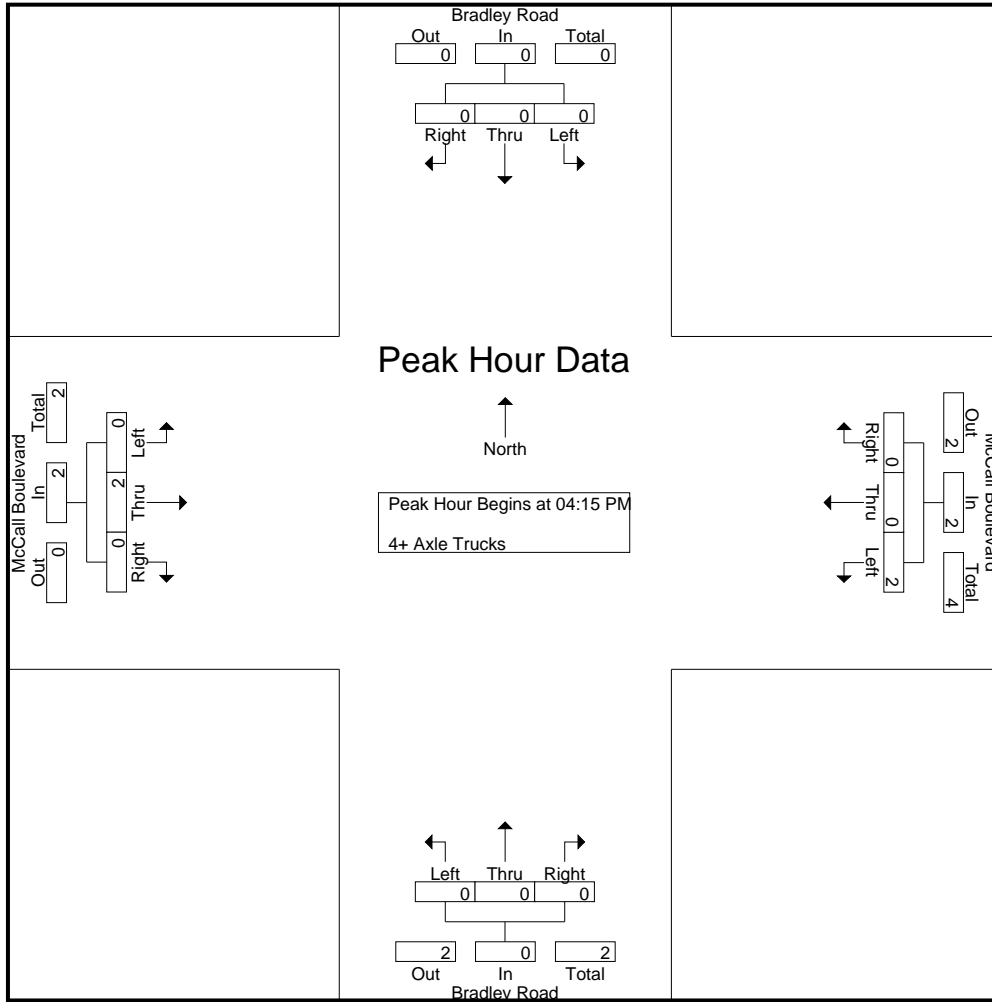
Start Time	Bradley Road Southbound				McCall Boulevard Westbound				Bradley Road Northbound				McCall Boulevard Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:15 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	1	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	1	2
Total Volume	0	0	0	0	2	0	0	2	0	0	0	0	0	2	0	2	4
% App. Total	0	0	0		100	0	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.500	.000	.000	.500	.000	.000	.000	.000	.000	.500	.000	.500	.500

Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:15 PM

City of Menifee
 N/S: Bradley Road
 E/W: McCall Boulevard
 Weather: Clear

File Name : 04_MEN_Bradley_McCall PM
 Site Code : 06721006
 Start Date : 1/12/2021
 Page No : 2



Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	1
Total Volume	0	0	0	0	2	0	0	2	0	0	0	0	0	2	0	2
% App. Total	0	0	0	0	100	0	0	0	0	0	0	0	0	100	0	0
PHF	.000	.000	.000	.000	.500	.000	.000	.500	.000	.000	.000	.000	.000	.500	.000	.500

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
1/22/19
TUESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

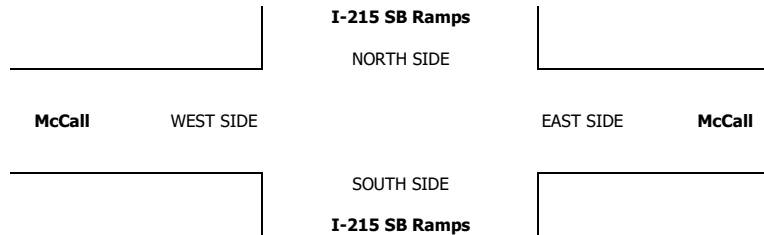
Menifee
I-215 SB Ramps
McCall

PROJECT #: SC2048
LOCATION #: 29
CONTROL: SIGNAL

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			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL	U-TURNS				
	NL X	NT X	NR X	SL 0.5	ST 0.5	SR 1	EL X	ET 2	ER 1	WL 1	WT 2	WR X		NB	SB	EB	WB	TTL

AM	7:00 AM	0	0	0	66	0	27	0	137	86	113	129	0	556					0
	7:15 AM	0	0	0	62	0	42	0	151	80	125	159	0	619					0
	7:30 AM	0	0	0	98	0	47	0	161	79	116	239	0	738					0
	7:45 AM	0	0	0	49	0	76	0	165	81	123	238	0	730					0
	8:00 AM	0	0	0	41	0	73	0	175	78	104	226	0	696					0
	8:15 AM	0	0	0	38	0	69	0	167	74	94	195	0	636					0
	8:30 AM	0	0	0	37	1	77	0	153	84	95	244	0	690					0
	8:45 AM	0	0	0	37	0	85	0	129	100	68	181	0	599					0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0	
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0	
VOLUMES	0	0	0	426	1	494	0	1,237	659	837	1,610	0	5,263	0	0	0	0	0	
APPROACH %	0%	0%	0%	46%	0%	54%	0%	65%	35%	34%	66%	0%							
APP/DEPART	0	/	0	921	/	1,497	1,896	/	1,663	2,446	/	2,103	0						
BEGIN PEAK HR	7:30 AM																		
VOLUMES	0	0	0	225	0	264	0	667	311	437	898	0	2,800						
APPROACH %	0%	0%	0%	46%	0%	54%	0%	68%	32%	33%	67%	0%							
PEAK HR FACTOR	0.000			0.847			0.968			0.925			0.948						
APP/DEPART	0	/	0	488	/	747	978	/	892	1,334	/	1,161	0						
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0					0	
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0					0	
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0					0	
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0					0	
	4:00 PM	0	0	0	74	0	128	0	248	63	71	239	0	821					0
	4:15 PM	0	0	0	84	0	122	0	213	75	79	201	0	772					0
	4:30 PM	0	0	0	74	0	124	0	232	89	70	206	0	794					0
	4:45 PM	0	0	0	93	1	117	0	203	68	71	213	0	764					0
	5:00 PM	0	0	0	88	2	118	0	250	61	71	210	0	798					0
	5:15 PM	0	0	0	89	0	129	0	201	81	70	210	0	778					0
5:30 PM	0	0	0	75	0	101	0	188	55	64	219	0	700					0	
5:45 PM	0	0	0	82	0	125	0	231	51	49	200	0	737					0	
VOLUMES	0	0	0	657	3	961	0	1,763	540	541	1,696	0	6,161	0	0	0	0	0	
APPROACH %	0%	0%	0%	41%	0%	59%	0%	77%	23%	24%	76%	0%							
APP/DEPART	0	/	0	1,621	/	1,084	2,303	/	2,420	2,237	/	2,657	0						
BEGIN PEAK HR	4:00 PM																		
VOLUMES	0	0	0	324	1	490	0	895	293	289	858	0	3,149						
APPROACH %	0%	0%	0%	40%	0%	60%	0%	75%	25%	25%	75%	0%							
PEAK HR FACTOR	0.000			0.967			0.928			0.928			0.959						
APP/DEPART	0	/	0	815	/	583	1,188	/	1,219	1,147	/	1,348	0						



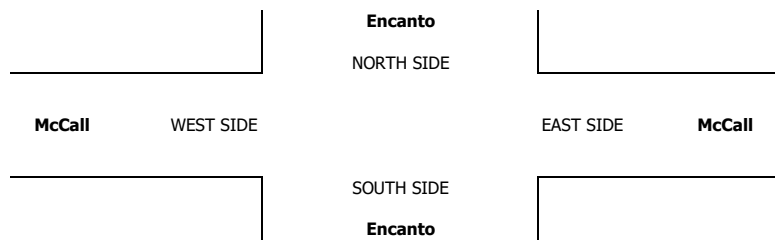
INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: 1/22/19 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Menifee Encanto McCall	PROJECT #: SC2048 LOCATION #: 31 CONTROL: SIGNAL						
NOTES:									
PCE	Class	1	2	3	4	5	6	AM	▲ N ◀ W S ▼
Adjusted	Factor	1	1.5	2	3	2	2	PM MD OTHER OTHER	

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			U-TURNS				
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB	SB	EB	WB

AM	7:00 AM	66	4	36	22	1	23	21	161	26	6	226	2	593					0		
	7:15 AM	57	1	37	17	1	22	20	146	22	9	243	8	583					0		
	7:30 AM	53	15	10	15	6	36	21	210	17	15	282	18	694					0		
	7:45 AM	58	5	14	17	5	36	51	171	20	23	283	21	702					0		
	8:00 AM	53	1	5	8	6	39	49	135	33	11	267	10	616					0		
	8:15 AM	47	6	12	4	7	37	31	143	28	11	233	6	563					0		
	8:30 AM	57	2	8	10	5	44	31	138	27	5	229	4	558					0		
	8:45 AM	39	2	3	6	2	31	22	93	19	6	173	7	401					0		
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0	
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0	
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0	
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0	
	VOLUMES	428	36	125	99	33	266	245	1,195	191	85	1,935	75	4,709	0	0	0	0	0		
APPROACH %	73%	6%	21%	25%	8%	67%	15%	73%	12%	4%	92%	4%									
APP/DEPART	588	/	355	397	/	308	1,630	/	1,418	2,094	/	2,628	0								
BEGIN PEAK HR	7:15 AM																				
VOLUMES	220	22	66	57	18	132	141	662	91	58	1,074	57	2,595								
APPROACH %	71%	7%	21%	28%	9%	64%	16%	74%	10%	5%	90%	5%									
PEAK HR FACTOR	0.812			0.900			0.904			0.909			0.924								
APP/DEPART	307	/	219	207	/	167	893	/	785	1,188	/	1,425	0								
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0		
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0		
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0		
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0		
	4:00 PM	52	11	12	10	6	35	40	205	72	5	154	3	604					0		
	4:15 PM	47	5	7	10	7	36	37	241	53	5	139	7	591					0		
	4:30 PM	40	6	7	5	7	30	47	208	50	5	167	12	582					0		
	4:45 PM	37	6	10	13	6	22	40	221	72	9	153	8	595					0		
	5:00 PM	46	7	9	4	4	35	35	247	59	13	147	6	609					0		
	5:15 PM	51	6	4	11	8	28	42	228	58	9	144	9	598					0		
	5:30 PM	39	1	10	6	6	19	40	186	58	14	148	3	527					0		
	5:45 PM	39	3	14	4	2	21	32	238	61	8	114	8	542					0		
	VOLUMES	349	44	73	62	46	225	312	1,772	481	68	1,163	54	4,646	0	0	0	0	0		
APPROACH %	75%	9%	16%	19%	14%	68%	12%	69%	19%	5%	91%	4%									
APP/DEPART	466	/	410	332	/	594	2,565	/	1,906	1,285	/	1,737	0								
BEGIN PEAK HR	4:30 PM																				
VOLUMES	173	25	30	33	25	115	164	903	238	36	610	35	2,383								
APPROACH %	76%	11%	13%	19%	15%	67%	13%	69%	18%	5%	90%	5%									
PEAK HR FACTOR	0.930			0.915			0.960			0.929			0.978								
APP/DEPART	227	/	223	172	/	299	1,304	/	965	680	/	897	0								



Appendix C-2

Roadway Segment Volume Data

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, January 29, 2019

CITY: Menifee

JOB #: SC2048

LOCATION: SR-74 between I-215 NB Ramps and Trumble

AM TIME								TOTAL	PM Time								TOTAL
	1	2	3	4	5	6	1			2	3	4	5	6			
0:00	47	0	0	3	0	0	50	12:00	172	14	3	9	0	2	200		
0:15	43	1	0	1	0	0	45	12:15	164	21	3	4	0	0	192		
0:30	32	0	0	0	0	0	32	12:30	171	22	4	2	0	4	203		
0:45	27	1	0	1	0	0	29	12:45	148	8	1	12	1	1	171		
1:00	24	1	0	0	0	0	25	13:00	190	17	6	9	0	2	224		
1:15	27	2	0	1	0	0	30	13:15	190	17	3	10	0	1	221		
1:30	22	0	0	2	0	0	24	13:30	227	19	2	9	1	3	261		
1:45	23	2	0	2	0	0	27	13:45	219	22	4	7	0	1	253		
2:00	29	1	0	2	0	0	32	14:00	197	15	3	8	0	1	224		
2:15	19	0	0	1	0	0	20	14:15	229	16	2	10	1	2	260		
2:30	24	1	1	2	0	0	28	14:30	273	18	4	11	0	3	309		
2:45	25	1	0	0	0	0	26	14:45	267	22	4	8	0	1	302		
3:00	24	0	0	2	0	1	27	15:00	293	26	2	9	0	2	332		
3:15	31	1	0	2	0	1	35	15:15	264	14	3	9	0	8	298		
3:30	48	1	0	2	0	0	51	15:30	261	26	5	5	0	3	300		
3:45	39	0	0	3	0	2	44	15:45	283	34	7	5	0	0	329		
4:00	33	2	0	1	0	2	38	16:00	275	20	2	8	0	1	306		
4:15	34	3	0	1	0	3	41	16:15	273	19	3	3	0	1	299		
4:30	50	4	0	4	0	0	58	16:30	292	18	5	4	0	3	322		
4:45	72	3	0	3	0	2	80	16:45	338	15	1	6	0	2	362		
5:00	55	5	1	5	0	1	67	17:00	317	23	1	3	0	2	346		
5:15	92	2	2	2	0	0	98	17:15	317	23	2	4	0	2	348		
5:30	104	9	6	4	0	5	128	17:30	300	22	3	5	0	4	334		
5:45	162	11	5	9	0	4	191	17:45	323	19	1	5	0	3	351		
6:00	112	14	6	5	0	3	140	18:00	282	22	1	0	0	0	305		
6:15	152	15	6	9	0	3	185	18:15	325	24	1	1	0	1	352		
6:30	144	21	9	11	0	3	188	18:30	275	14	1	5	0	4	299		
6:45	184	20	4	8	0	2	218	18:45	255	17	0	5	0	1	278		
7:00	192	16	4	5	0	1	218	19:00	239	8	2	4	0	3	256		
7:15	218	20	3	2	0	2	245	19:15	207	2	0	3	0	1	213		
7:30	187	21	3	3	0	2	216	19:30	195	5	1	2	0	2	205		
7:45	174	21	3	4	0	8	210	19:45	174	11	0	0	0	1	186		
8:00	157	15	3	12	0	4	191	20:00	168	8	0	1	0	1	178		
8:15	140	21	1	16	0	3	181	20:15	136	6	0	4	0	2	148		
8:30	169	24	2	9	0	3	207	20:30	143	4	0	2	0	1	150		
8:45	133	24	1	7	0	0	165	20:45	147	3	0	3	0	1	154		
9:00	124	12	1	8	0	1	146	21:00	108	6	0	4	0	1	119		
9:15	122	12	5	13	0	1	153	21:15	105	2	0	1	0	0	108		
9:30	113	30	0	10	0	1	154	21:30	113	3	0	2	0	1	119		
9:45	106	22	4	11	0	1	144	21:45	102	3	1	5	0	2	113		
10:00	118	16	3	16	0	1	154	22:00	107	1	1	2	0	0	111		
10:15	138	20	1	9	0	1	169	22:15	85	2	1	1	0	3	92		
10:30	130	14	3	10	0	1	158	22:30	91	2	0	3	0	0	96		
10:45	152	23	5	10	0	3	193	22:45	70	0	0	3	0	1	74		
11:00	133	16	2	10	0	1	162	23:00	67	0	1	2	0	1	71		
11:15	167	22	2	3	0	1	195	23:15	56	0	0	1	0	0	57		
11:30	147	16	6	6	0	2	177	23:30	54	1	0	2	0	1	58		
11:45	157	12	1	12	0	1	183	23:45	61	1	0	0	1	0	63		
TOTAL	4,655	498	93	262	0	70	5,578	TOTAL	9,548	615	84	221	4	80	10,552		

AM PEAK HOUR 6:45 AM
AM PEAK VOLUME 897

AM PEAK HOUR 4:45 PM
AM PEAK VOLUME 1,390

CLASS	DESCRIPTION	TOTAL: AM+PM						
		1	2	3	4	5	6	TOTAL
CLASS 1	PASSENGER VEHICLES	14,203	1,113	177	483	4	150	16,130
CLASS 2	2-AXLE TRUCKS	88.1%	6.9%	1.1%	3.0%	0.0%	0.9%	100.0%
CLASS 3	3-AXLE TRUCKS							
CLASS 4	4 OR MORE AXLE TRUCKS							
CLASS 5	RV							
CLASS 6	Buses							
TOTAL: ALL		29,561	2,448	370	980	10	302	33,671
% OF TOTAL		87.8%	7.3%	1.1%	2.9%	0.0%	0.9%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, January 29, 2019
JOB #: SC2048

CITY: Menifee
LOCATION: SR-74 between I-215 NB Ramps and Trumble

AM TIME							TOTAL	PM Time							TOTAL
	1	2	3	4	5	6			1	2	3	4	5	6	
0:00	33	3	0	1	0	0	37	12:00	179	18	5	11	0	1	214
0:15	28	1	0	3	0	0	32	12:15	190	11	1	7	0	3	212
0:30	26	1	0	1	0	0	28	12:30	195	23	1	6	0	4	229
0:45	22	1	0	1	0	0	24	12:45	176	19	3	10	0	4	212
1:00	11	0	0	1	0	1	13	13:00	170	22	6	9	0	2	209
1:15	14	2	0	1	0	0	17	13:15	191	18	2	6	0	2	219
1:30	17	1	0	1	0	0	19	13:30	197	23	5	6	0	1	232
1:45	19	1	0	1	0	0	21	13:45	152	26	4	9	1	4	196
2:00	18	1	1	2	0	0	22	14:00	194	29	3	4	0	1	231
2:15	27	2	0	0	0	0	29	14:15	214	19	4	6	0	1	244
2:30	28	3	0	1	0	0	32	14:30	225	17	6	7	0	0	255
2:45	36	5	0	4	0	0	45	14:45	213	19	5	7	0	1	245
3:00	38	2	0	3	1	1	45	15:00	225	16	1	9	0	0	251
3:15	55	4	1	3	0	1	64	15:15	259	9	6	10	0	6	290
3:30	83	7	0	3	0	0	93	15:30	274	20	4	11	0	5	314
3:45	120	4	1	4	0	1	130	15:45	249	19	5	5	1	4	283
4:00	144	12	0	1	0	4	161	16:00	222	16	4	5	0	0	247
4:15	175	13	1	6	0	0	195	16:15	227	17	3	7	0	2	256
4:30	233	20	1	4	0	2	260	16:30	291	19	6	7	0	1	324
4:45	219	14	0	3	0	2	238	16:45	249	14	2	10	0	2	277
5:00	199	18	0	4	0	1	222	17:00	286	10	4	9	0	2	311
5:15	251	29	1	4	0	3	288	17:15	273	14	6	9	0	2	304
5:30	276	16	2	5	0	6	305	17:30	260	15	2	5	0	1	283
5:45	233	23	1	7	0	3	267	17:45	194	12	2	2	0	3	213
6:00	254	16	1	5	0	6	282	18:00	216	12	1	1	0	1	231
6:15	230	32	7	8	0	2	279	18:15	183	9	1	1	0	2	196
6:30	242	37	8	3	0	3	293	18:30	158	12	0	2	0	0	172
6:45	244	30	1	12	0	0	287	18:45	159	5	0	3	0	1	168
7:00	243	34	3	9	0	2	291	19:00	150	8	1	2	0	3	164
7:15	265	20	1	9	0	5	300	19:15	169	10	1	2	0	1	183
7:30	318	32	3	10	0	1	364	19:30	121	6	1	2	0	2	132
7:45	254	34	6	2	0	4	300	19:45	115	6	0	4	0	3	128
8:00	248	22	8	12	0	4	294	20:00	139	6	1	4	0	1	151
8:15	224	24	6	7	0	3	264	20:15	154	4	0	4	0	1	163
8:30	226	30	5	9	0	5	275	20:30	107	3	0	2	0	1	113
8:45	207	27	6	9	0	1	250	20:45	91	2	0	3	0	1	97
9:00	217	50	4	8	0	1	280	21:00	84	4	2	2	0	1	93
9:15	197	54	2	12	1	1	267	21:15	90	4	0	2	0	0	96
9:30	198	31	2	8	0	2	241	21:30	73	0	0	1	0	2	76
9:45	217	18	2	6	0	2	245	21:45	91	3	1	1	0	1	97
10:00	168	14	2	9	0	1	194	22:00	84	2	1	2	0	1	90
10:15	177	21	2	8	0	1	209	22:15	102	2	0	3	0	0	107
10:30	172	17	3	13	0	0	205	22:30	74	0	0	1	0	0	75
10:45	187	15	3	8	1	2	216	22:45	48	1	0	4	0	1	54
11:00	169	15	1	9	0	2	196	23:00	38	1	0	1	0	0	40
11:15	190	19	3	10	0	1	223	23:15	38	1	0	0	0	0	39
11:30	195	15	2	14	1	2	229	23:30	25	0	0	2	0	0	27
11:45	177	18	3	4	0	1	203	23:45	20	1	0	3	0	0	24
TOTAL	7,524	808	93	268	4	77	8,774	TOTAL	7,834	527	100	229	2	75	8,767

AM PEAK HOUR 7:15 AM
AM PEAK VOLUME 1,258

AM PEAK HOUR 4:30 PM
AM PEAK VOLUME 1,216

CLASS 1	PASSENGER VEHICLES	TOTAL: AM+PM	15,358	1,335	193	497	6	152	17,541
CLASS 2	2-AXLE TRUCKS	% OF TOTAL	87.6%	7.6%	1.1%	2.8%	0.0%	0.9%	100.0%
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV								
CLASS 6	BUS								

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, January 29, 2019

CITY: Menifee

JOB #: SC2048

LOCATION: SR-74 between Trumble and Sherman

AM TIME							TOTAL	PM Time							TOTAL
	1	2	3	4	5	6			1	2	3	4	5	6	
0:00	45	0	0	2	0	0	47	12:00	138	12	2	16	0	1	169
0:15	38	1	0	1	0	0	40	12:15	139	19	2	10	0	0	170
0:30	28	0	0	0	0	0	28	12:30	143	20	4	8	0	3	178
0:45	23	1	0	1	0	0	25	12:45	125	7	1	18	1	1	153
1:00	23	1	0	0	0	0	24	13:00	158	14	4	14	0	2	192
1:15	28	2	0	1	0	0	31	13:15	163	10	3	16	0	1	193
1:30	22	0	0	2	0	0	24	13:30	178	13	2	15	0	1	209
1:45	20	0	0	2	0	0	22	13:45	164	17	3	12	0	2	198
2:00	26	1	0	1	0	0	28	14:00	161	12	2	12	0	1	188
2:15	18	0	0	1	0	0	19	14:15	185	13	2	14	1	1	216
2:30	19	1	1	1	0	0	22	14:30	234	13	5	15	0	2	269
2:45	24	0	0	0	0	0	24	14:45	224	16	3	11	0	2	256
3:00	18	0	0	1	0	1	20	15:00	240	21	2	13	0	1	277
3:15	24	1	0	2	0	1	28	15:15	225	6	2	7	0	4	244
3:30	24	2	0	1	0	0	27	15:30	225	15	3	4	0	3	250
3:45	34	0	0	2	0	2	38	15:45	227	18	6	4	0	0	255
4:00	31	2	0	1	0	2	36	16:00	249	13	1	4	0	1	268
4:15	30	2	0	0	0	3	35	16:15	228	12	3	3	0	1	247
4:30	45	3	0	2	0	0	50	16:30	260	14	2	2	0	2	280
4:45	60	3	0	1	0	2	66	16:45	289	9	1	6	0	0	305
5:00	50	4	1	2	0	1	58	17:00	275	17	1	0	0	2	295
5:15	63	1	2	2	0	0	68	17:15	257	15	2	3	0	2	279
5:30	50	4	5	2	0	5	66	17:30	245	6	2	3	0	4	260
5:45	79	10	6	6	0	4	105	17:45	271	6	1	1	0	3	282
6:00	81	11	5	3	0	3	103	18:00	237	6	1	0	0	0	244
6:15	108	7	7	4	0	2	128	18:15	249	12	1	0	0	1	263
6:30	112	19	9	9	0	4	153	18:30	203	8	0	3	0	4	218
6:45	134	19	4	7	0	2	166	18:45	205	11	0	5	0	1	222
7:00	164	22	3	12	0	1	202	19:00	193	4	1	3	0	3	204
7:15	165	20	2	10	0	1	198	19:15	153	1	0	3	0	1	158
7:30	147	21	4	7	0	2	181	19:30	148	5	0	1	0	2	156
7:45	145	19	3	10	0	3	180	19:45	132	8	0	1	0	1	142
8:00	123	13	2	15	0	2	155	20:00	145	3	0	0	0	1	149
8:15	111	15	1	17	0	4	148	20:15	135	3	0	2	0	2	142
8:30	130	20	2	15	0	2	169	20:30	112	2	0	1	0	1	116
8:45	107	19	1	12	0	0	139	20:45	122	1	0	2	0	1	126
9:00	109	15	1	12	0	1	138	21:00	99	4	0	4	0	1	108
9:15	104	19	3	21	0	0	147	21:15	99	2	0	0	0	0	101
9:30	98	18	0	16	0	1	133	21:30	96	1	0	1	0	1	99
9:45	94	16	3	17	0	0	130	21:45	95	3	0	3	0	2	103
10:00	103	13	3	22	0	1	142	22:00	97	0	0	1	0	0	98
10:15	121	13	1	15	0	1	151	22:15	88	2	0	1	0	3	94
10:30	111	7	3	16	0	1	138	22:30	90	2	0	2	0	0	94
10:45	126	14	4	15	0	3	162	22:45	67	1	0	2	0	1	71
11:00	113	15	2	15	0	1	146	23:00	60	0	0	1	0	1	62
11:15	129	16	1	11	0	1	158	23:15	47	0	0	1	0	0	48
11:30	119	10	5	8	0	2	144	23:30	50	1	0	2	0	1	54
11:45	128	10	2	18	0	1	159	23:45	62	0	0	0	1	0	63
TOTAL	3,704	410	86	341	0	60	4,601	TOTAL	7,987	398	62	250	3	68	8,768

AM PEAK HOUR 7:00 AM
AM PEAK VOLUME 761

AM PEAK HOUR 4:30 PM
AM PEAK VOLUME 1,159

CLASS	DESCRIPTION	TOTAL: AM+PM						
		1	2	3	4	5	6	TOTAL
CLASS 1	PASSENGER VEHICLES	11,691	808	148	591	3	128	13,369
CLASS 2	2-AXLE TRUCKS	87.4%	6.0%	1.1%	4.4%	0.0%	1.0%	100.0%
CLASS 3	3-AXLE TRUCKS							
CLASS 4	4 OR MORE AXLE TRUCKS							
CLASS 5	RV							
CLASS 6	Buses							
TOTAL: ALL		24,106	1,796	321	1,187	9	255	27,674
% OF TOTAL		87.1%	6.5%	1.2%	4.3%	0.0%	0.9%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, January 29, 2019
JOB #: SC2048

CITY: Menifee
LOCATION: SR-74 between Trumble and Sherman

AM TIME							TOTAL	PM Time							TOTAL
	1	2	3	4	5	6			1	2	3	4	5	6	
0:00	23	2	0	1	0	0	26	12:00	140	15	6	11	0	1	173
0:15	20	1	0	1	0	0	22	12:15	160	12	1	13	0	3	189
0:30	22	1	0	1	0	0	24	12:30	168	22	1	12	0	3	206
0:45	21	1	0	1	0	0	23	12:45	153	15	3	19	0	4	194
1:00	10	0	0	0	0	1	11	13:00	142	18	6	16	0	1	183
1:15	12	2	0	0	0	0	14	13:15	160	15	1	12	0	1	189
1:30	12	0	0	1	0	0	13	13:30	156	19	4	10	0	1	190
1:45	18	1	0	1	0	0	20	13:45	123	16	5	13	0	4	161
2:00	15	1	1	2	0	0	19	14:00	160	23	2	11	0	1	197
2:15	21	2	0	0	0	0	23	14:15	174	22	5	11	0	1	213
2:30	27	2	0	1	0	0	30	14:30	183	11	5	15	0	1	215
2:45	33	3	0	4	0	0	40	14:45	178	17	5	14	0	1	215
3:00	32	1	0	3	1	1	38	15:00	174	10	1	6	0	0	191
3:15	44	4	1	3	0	1	53	15:15	205	12	6	11	0	3	237
3:30	69	7	0	3	0	0	79	15:30	205	10	4	11	0	1	231
3:45	102	1	1	4	0	1	109	15:45	187	15	4	4	1	3	214
4:00	125	10	0	0	0	4	139	16:00	165	18	3	6	0	0	192
4:15	150	11	1	4	0	0	166	16:15	189	18	4	7	0	2	220
4:30	211	14	1	2	0	2	230	16:30	188	14	6	5	0	1	214
4:45	198	11	0	3	0	2	214	16:45	196	16	2	9	0	2	225
5:00	178	16	0	3	0	1	198	17:00	178	11	4	8	0	2	203
5:15	233	24	1	4	0	3	265	17:15	218	14	6	6	0	2	246
5:30	257	14	1	3	0	4	279	17:30	202	19	2	5	0	1	229
5:45	214	20	1	5	0	3	243	17:45	165	13	0	3	0	3	184
6:00	227	13	1	4	0	4	249	18:00	176	7	1	0	0	1	185
6:15	215	22	4	3	0	2	246	18:15	155	14	1	3	0	2	175
6:30	207	23	5	2	0	3	240	18:30	132	10	0	1	0	0	143
6:45	213	18	0	6	0	0	237	18:45	142	6	0	3	0	1	152
7:00	203	15	2	3	0	2	225	19:00	109	8	0	2	0	3	122
7:15	212	9	2	7	0	4	234	19:15	121	10	2	3	0	1	137
7:30	266	18	3	14	0	2	303	19:30	95	8	1	3	0	2	109
7:45	216	20	5	7	0	3	251	19:45	84	6	0	4	0	3	97
8:00	179	11	7	13	0	3	213	20:00	87	7	1	4	0	1	100
8:15	187	14	5	17	0	1	224	20:15	83	3	0	4	0	1	91
8:30	177	20	5	8	0	3	213	20:30	78	3	0	1	0	1	83
8:45	168	20	5	14	0	0	207	20:45	77	1	0	3	0	1	82
9:00	170	10	5	13	0	1	199	21:00	63	3	0	2	0	1	69
9:15	157	18	2	15	1	0	193	21:15	66	2	0	2	0	0	70
9:30	156	18	1	13	0	1	189	21:30	49	0	0	0	0	2	51
9:45	189	12	3	8	0	1	213	21:45	53	2	1	1	0	1	58
10:00	140	12	2	12	0	0	166	22:00	45	1	1	2	0	1	50
10:15	148	18	2	18	1	1	188	22:15	65	2	0	0	0	0	67
10:30	141	16	2	17	1	0	177	22:30	53	0	0	0	0	0	53
10:45	157	9	3	13	0	2	184	22:45	36	1	0	2	0	1	40
11:00	142	10	0	17	0	2	171	23:00	30	1	0	0	0	0	31
11:15	165	16	3	15	0	1	200	23:15	31	0	0	0	0	0	31
11:30	155	14	1	17	1	2	190	23:30	21	0	0	1	0	0	22
11:45	142	12	3	9	0	1	167	23:45	16	1	0	2	0	0	19
TOTAL	6,379	517	79	315	5	62	7,357	TOTAL	6,036	471	94	281	1	65	6,948

AM PEAK HOUR 5:15 AM
AM PEAK VOLUME 1,036

AM PEAK HOUR 4:45 PM
AM PEAK VOLUME 903

CLASS 1	PASSENGER VEHICLES	TOTAL: AM+PM	12,415	988	173	596	6	127	14,305
CLASS 2	2-AXLE TRUCKS	% OF TOTAL	86.8%	6.9%	1.2%	4.2%	0.0%	0.9%	100.0%
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV								
CLASS 6	BUS								

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

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

DATE: Tuesday, January 22, 2019
JOB #: SC2048

LOCATION#
CLASS16 Ethanac between Palomar and Menifee

AM TIME	EASTBOUND													TOTAL	PM Time	EASTBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	29	1	0	0	0	0	0	1	0	0	0	0	31	12:00	0	149	18	1	4	1	0	1	1	2	0	0	178	
0:15	0	30	1	0	0	0	0	0	1	0	0	0	0	32	12:15	2	142	18	1	5	2	1	1	1	0	3	1	178	
0:30	0	24	1	0	0	0	0	0	0	0	0	1	0	26	12:30	1	115	6	2	11	1	0	0	0	2	1	0	139	
0:45	0	23	3	0	0	0	0	0	0	0	0	0	0	26	12:45	1	153	17	0	7	6	2	1	2	0	1	0	190	
1:00	0	19	0	0	2	0	0	2	0	0	0	0	0	23	13:00	0	133	23	3	10	3	0	1	1	0	0	1	175	
1:15	0	23	2	0	0	0	0	3	0	0	0	0	0	28	13:15	0	146	15	1	6	2	1	1	1	0	4	0	177	
1:30	0	19	1	0	1	0	0	1	0	0	0	0	0	22	13:30	0	180	18	2	6	2	1	1	1	0	1	0	214	
1:45	0	16	4	0	1	0	0	1	1	0	0	0	0	23	13:45	0	155	16	0	5	3	0	0	2	0	0	2	183	
2:00	0	17	3	0	3	0	0	0	0	0	0	0	0	23	14:00	0	168	22	3	4	4	1	0	0	0	2	0	206	
2:15	0	14	0	0	0	0	0	0	0	0	0	0	0	14	14:15	0	177	20	0	9	6	2	0	2	0	0	2	218	
2:30	0	17	1	0	0	0	0	1	1	0	0	0	0	20	14:30	1	210	22	1	6	5	2	1	1	0	0	0	249	
2:45	0	18	3	0	0	0	0	0	0	0	0	0	0	21	14:45	2	225	16	0	6	4	1	0	3	0	1	0	260	
3:00	0	18	0	0	0	0	0	0	0	0	0	0	0	18	15:00	0	220	20	0	2	10	2	0	0	0	0	1	257	
3:15	0	15	1	0	0	0	0	0	1	0	0	0	0	17	15:15	0	207	11	0	9	5	4	0	2	1	0	0	240	
3:30	0	17	2	1	2	0	0	0	0	0	0	0	0	22	15:30	1	196	20	0	6	8	0	0	3	0	1	1	0	236
3:45	0	20	2	0	1	0	0	0	0	0	0	0	0	23	15:45	0	221	18	1	6	8	0	0	0	0	1	0	256	
4:00	0	9	4	0	4	0	0	1	1	0	0	0	0	19	16:00	1	243	21	2	5	3	2	0	0	1	0	0	278	
4:15	0	22	1	0	1	0	0	0	0	0	0	0	0	24	16:15	1	253	22	3	10	7	0	0	0	0	0	0	296	
4:30	0	23	3	0	3	0	0	0	1	0	0	0	0	30	16:30	1	242	15	1	12	3	0	0	1	0	0	0	275	
4:45	0	42	9	1	3	0	0	1	0	0	0	0	0	56	16:45	0	260	25	0	4	6	0	0	2	0	0	0	297	
5:00	0	45	8	1	3	0	0	1	0	0	0	0	0	58	17:00	0	270	20	2	10	5	0	0	0	0	1	0	309	
5:15	0	42	7	0	6	2	0	1	0	0	0	0	0	57	17:15	1	256	14	0	3	8	1	0	1	1	0	0	285	
5:30	0	63	6	0	6	3	0	1	0	0	0	0	0	79	17:30	1	247	15	0	6	1	0	0	0	1	1	2	274	
5:45	0	63	12	0	7	5	0	1	1	2	0	0	1	92	17:45	1	234	20	2	5	6	0	1	1	0	0	0	270	
6:00	0	69	10	1	9	2	0	0	2	0	0	0	0	93	18:00	0	236	18	2	5	2	0	0	0	0	0	0	263	
6:15	0	79	21	0	7	5	0	1	0	0	1	0	1	115	18:15	1	193	19	0	7	2	0	0	1	0	0	0	223	
6:30	0	122	15	1	15	6	0	2	0	0	1	1	0	163	18:30	1	178	19	2	4	7	0	0	0	0	1	0	212	
6:45	0	147	13	1	12	2	1	1	0	1	0	0	1	179	18:45	0	191	12	1	6	2	0	0	1	0	0	0	214	
7:00	2	246	14	0	6	4	2	0	4	0	0	2	0	280	19:00	0	158	18	1	3	5	0	0	0	0	1	0	187	
7:15	0	256	15	0	9	3	1	1	1	1	1	0	1	289	19:15	1	138	14	2	4	3	1	0	0	0	0	0	163	
7:30	0	208	17	0	8	4	0	1	2	2	2	2	4	250	19:30	1	127	15	3	4	1	0	0	0	0	0	0	151	
7:45	0	177	10	3	11	1	1	1	0	0	0	2	0	206	19:45	0	98	9	1	3	3	0	0	1	0	0	0	115	
8:00	0	154	21	2	6	2	0	1	1	0	3	0	0	190	20:00	0	98	14	1	5	0	0	0	1	0	0	0	119	
8:15	0	141	15	3	10	1	0	1	3	0	2	0	1	177	20:15	1	112	11	0	3	0	1	0	0	0	1	0	129	
8:30	0	155	20	0	5	6	1	1	0	0	0	0	1	189	20:30	1	91	7	0	5	0	0	1	0	0	0	0	105	
8:45	1	133	14	1	10	0	1	0	1	0	0	0	0	161	20:45	0	95	8	2	1	2	0	0	1	0	0	0	109	
9:00	0	94	26	1	9	2	0	0	0	0	2	0	0	134	21:00	0	95	6	0	1	0	0	0	0	0	0	0	102	
9:15	0	111	20	2	18	3	0	1	2	0	0	0	0	157	21:15	0	93	9	1	4	2	0	0	0	0	0	0	109	
9:30	1	111	16	2	15	1	1	2	2	0	5	0	0	156	21:30	0	93	12	1	0	0	0	0	0	0	1	0	107	
9:45	0	118	19	5	6	2	2	1	1	0	0	0	0	154	21:45	0	77	6	2	1	1	0	0	0	0	0	0	87	
10:00	0	107	16	1	9	3	0	1	4	0	3	0	0	144	22:00	0	67	9	0	2	1	0	0	1	0	0	0	80	
10:15	0	139	10	4	6	3	0	1	1	0	2	0	0	166	22:15	0	87	6	3	3	1	1	0	1	0	1	0	103	
10:30	0	125	17	2	8	0	1	0	3	0	0	1	0	157	22:30	0	72	4	0	2	0	0	0	0	0	0	0	78	
10:45	1	98	10	0	6	1	0	1	2	0	5	0	0	124	22:45	1	83	5	1	1	2	0	0	0	0	0	0	93	
11:00	0	115	23	1	11	2	0	2	1	1	0	0	0	156	23:00	0	49	3	0	1	0	0	0	1	0	0	0	54	
11:15	1	115	20	1	11	1	0	2	0	0	2	0	0	153	23:15	0	45	1	0	0	0	0	0	0	0	0	0	46	
11:30	0	129	16	1	5	2	0	2	2	0	3	0	0	160	23:30	1	43	5	1	2	0	1	2	0	0	1	0	57	
11:45	0	138	20	1	7	4	0	1	1	0	0	0	0	172	23:45	1	39	6	0	0	1	0	0	1	0	0	0	48	
TOTAL	6	3,915	473	36	262	70	11	38	40	7	33	8	10	4,909	TOTAL	23	7,360	668	49	224	144	24	11	34	4	25	8	20	8,594

AM PEAK HOUR 7:00 AM
AM PEAK VOLUME 1,025

PM PEAK HOUR 4:15 PM
PM PEAK VOLUME 1,177

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	29	11,275	1,141	85	486	214	35	49	74	11	58	16	30	13,503
% OF TOTAL	0.2%	83.5%	8.4%	0.6%	3.6%	1.6%	0.3%	0.4%	0.5%	0.1%	0.4%	0.1%	0.2%	100.0%

Class	1	2	3	4	5	6	7	8	9	10	11	12	13	
TOTAL: ALL	48	22,125	2,557	163	1,066	412	56	110	125	16	144	30	42	26,894
% OF TOTAL	0.4%	163.9%	18.9%	1.2%	7.9%	3.1%	0.4%	0.8%	0.9%	0.1%	1.1%	0.2%	0.3%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

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

DATE: Tuesday, January 22, 2019
JOB #: SC2048

LOCATION#
CLASS16 Ethanac between Palomar and Menifee

AM TIME	WESTBOUND													TOTAL	PM TIME	WESTBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	12	3	0	0	0	0	0	0	0	0	0	0	15	12:00	0	120	12	2	9	4	0	2	1	0	3	0	0	153
0:15	0	25	4	0	0	0	0	0	0	0	0	0	0	29	12:15	1	168	18	2	5	2	0	1	1	0	3	0	0	201
0:30	0	9	2	1	2	0	0	1	0	0	0	0	0	15	12:30	0	145	15	1	8	0	0	1	3	0	3	0	0	176
0:45	0	9	1	0	2	0	0	0	0	0	0	0	0	12	12:45	0	159	17	2	11	3	0	1	0	0	4	1	1	199
1:00	0	11	2	0	0	0	0	0	0	0	0	0	0	13	13:00	0	122	14	1	4	0	1	1	0	0	3	0	0	146
1:15	0	9	2	0	0	0	0	0	0	0	0	0	0	11	13:15	0	163	31	1	5	7	0	1	4	2	2	0	0	216
1:30	0	6	1	0	0	0	0	0	0	0	0	0	0	7	13:30	0	144	13	2	7	5	0	2	0	0	3	0	2	178
1:45	0	22	0	0	1	0	0	0	1	0	1	0	0	25	13:45	0	132	24	4	9	1	0	0	1	0	1	0	0	172
2:00	0	24	2	0	1	0	0	0	0	0	0	0	0	27	14:00	1	124	17	2	9	0	1	5	1	0	3	0	0	163
2:15	0	17	5	0	0	0	0	0	1	0	0	0	0	23	14:15	0	151	14	1	4	8	1	1	1	1	3	0	2	187
2:30	0	26	6	0	1	0	0	1	0	0	0	0	0	34	14:30	0	163	21	2	7	3	1	0	1	0	2	0	0	200
2:45	0	22	5	0	2	0	0	1	0	0	0	0	0	30	14:45	1	148	21	2	8	3	0	1	2	0	0	0	0	186
3:00	0	34	9	1	4	0	0	1	0	0	0	0	0	49	15:00	0	134	23	0	13	3	0	2	0	0	1	1	0	177
3:15	1	45	8	1	2	0	0	0	1	0	0	0	0	58	15:15	0	209	29	0	7	5	1	1	4	0	2	1	0	259
3:30	0	77	15	0	11	1	0	1	0	0	0	0	0	105	15:30	1	227	23	0	16	4	1	0	0	0	0	0	0	272
3:45	0	76	22	1	7	0	0	0	0	0	0	0	0	106	15:45	0	162	24	1	9	2	0	0	0	0	1	0	0	199
4:00	1	73	18	3	7	1	0	0	0	0	0	0	0	103	16:00	0	165	23	0	9	3	0	0	0	0	0	0	0	200
4:15	0	128	30	2	10	2	0	0	0	0	0	0	0	172	16:15	0	159	11	1	10	2	2	1	2	0	0	1	0	189
4:30	0	160	25	0	11	1	1	1	1	0	0	0	0	200	16:30	0	174	19	0	5	4	1	1	0	0	2	0	1	207
4:45	0	149	22	1	5	5	0	0	0	0	0	0	0	182	16:45	1	193	20	2	6	2	2	1	0	0	0	0	1	228
5:00	0	148	26	1	15	2	0	0	0	0	1	0	0	193	17:00	0	183	19	0	12	6	0	0	0	1	0	0	3	224
5:15	0	172	28	1	7	4	0	0	0	0	0	0	0	212	17:15	0	197	24	1	10	3	1	0	1	0	0	0	1	238
5:30	1	197	25	3	4	3	0	2	0	0	0	0	0	235	17:30	1	195	21	0	8	3	0	1	0	0	0	1	0	230
5:45	0	138	20	3	17	4	0	0	0	0	0	1	0	183	17:45	0	165	21	1	5	6	0	1	0	0	0	0	0	199
6:00	0	170	31	2	10	2	0	0	1	0	0	0	0	216	18:00	0	148	18	0	6	0	0	1	0	0	0	0	0	173
6:15	0	169	15	1	7	7	0	1	1	1	0	0	0	202	18:15	0	121	11	1	10	5	0	1	0	0	1	0	0	150
6:30	1	152	26	0	6	3	0	0	1	0	3	0	0	192	18:30	0	110	11	2	8	2	1	0	0	0	0	0	0	134
6:45	0	168	25	0	13	5	0	1	2	0	0	1	0	215	18:45	0	103	16	1	4	0	0	0	0	0	0	0	0	124
7:00	1	192	18	1	8	6	0	0	1	0	1	1	0	229	19:00	0	74	8	0	2	1	0	1	0	0	0	0	0	86
7:15	1	228	20	0	8	3	1	0	2	0	0	0	0	263	19:15	0	80	6	0	6	2	0	0	0	0	0	0	0	94
7:30	0	225	34	0	8	5	0	1	0	0	0	1	0	274	19:30	0	103	4	1	7	0	0	1	0	0	0	0	0	116
7:45	3	239	14	1	6	8	0	1	1	0	7	2	0	282	19:45	0	63	11	2	4	2	1	0	0	0	0	0	0	83
8:00	0	197	23	1	5	5	1	1	2	0	0	0	1	236	20:00	0	60	13	0	0	2	0	0	1	0	0	0	0	76
8:15	0	179	30	0	5	2	0	0	1	0	0	0	0	217	20:15	0	78	7	0	3	0	0	2	0	0	0	0	0	90
8:30	0	197	12	1	14	2	0	0	0	0	2	1	0	229	20:30	0	59	11	0	6	0	0	0	0	0	0	0	0	76
8:45	0	156	19	1	9	4	0	1	0	0	1	0	0	191	20:45	0	45	7	0	3	0	0	0	1	0	1	0	0	57
9:00	0	137	10	1	5	3	0	1	1	0	2	0	0	160	21:00	0	50	2	1	4	0	0	0	0	0	0	0	0	57
9:15	1	139	18	0	6	5	0	0	0	0	4	0	0	173	21:15	0	43	9	0	2	0	0	1	0	0	0	0	0	55
9:30	0	136	19	2	11	3	0	3	1	0	0	0	0	175	21:30	0	52	5	0	3	0	0	0	0	0	0	0	0	60
9:45	0	157	26	0	4	2	1	1	2	0	6	0	0	199	21:45	0	47	5	0	2	1	0	1	0	0	0	0	0	56
10:00	0	120	23	0	6	1	0	0	0	0	1	0	0	151	22:00	0	32	4	1	1	0	0	0	0	0	0	0	0	38
10:15	2	109	21	1	18	2	0	2	0	0	2	1	0	158	22:15	0	46	4	0	2	0	0	0	0	0	0	0	0	52
10:30	1	141	18	1	9	4	0	1	0	0	6	0	0	181	22:30	0	37	1	0	0	0	0	0	0	0	0	0	0	38
10:45	0	139	20	2	8	3	1	0	4	0	0	0	0	177	22:45	0	26	2	0	2	1	0	2	0	0	0	0	0	33
11:00	0	127	20	0	7	2	0	0	1	1	0	4	1	163	23:00	0	27	2	0	0	0	0	0	0	0	0	0	0	29
11:15	0	129	15	1	7	0	0	2	1	0	2	0	0	157	23:15	0	19	3	0	2	0	0	0	0	0	0	0	0	24
11:30	0	141	17	2	7	1	1	2	0	0	2	0	0	173	23:30	0	33	4	0	0	0	0	0	0	0	0	0	0	37
11:45	0	130	21	5	11	2	1	0	0	0	3	0	0	173	23:45	0	26	2	0	0	0	0	0	1	0	0	0	0	29
TOTAL	13	5,466	776	41	307	103	7	27	26	1	48	9	1	6,825	TOTAL	6	5,384	640	37	273	95	14	34	25	4	38	5	11	6,566

AM PEAK HOUR 7:15 AM
AM PEAK VOLUME 1,055

PM PEAK HOUR 3:15 PM
PM PEAK VOLUME 930

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	19	###	1,416	78	580	198	21	61	51	5	86	14	12	13,391
% OF TOTAL	0.1%	81.0%	10.6%	0.6%	4.3%	1.5%	0.2%	0.5%	0.4%	0.0%	0.6%	0.1%	0.1%	100.0%

Class **1** **2** **3** **4** **5** **6** **7** **8** **9** **10** **11** **12** **13**

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

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

DATE: Tuesday, January 22, 2019
JOB #: SC2048

LOCATION#
CLASS17 Ethanac between Menifee and Briggs

AM TIME	EASTBOUND													TOTAL	PM Time	EASTBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	31	2	0	0	0	0	0	0	0	0	0	0	33	12:00	0	167	21	0	3	3	0	2	0	0	0	196		
0:15	0	32	1	0	0	0	0	0	1	0	0	0	0	34	12:15	0	160	25	0	5	2	0	2	1	0	1	197		
0:30	0	29	1	0	0	0	0	0	0	0	0	1	0	31	12:30	0	133	18	1	8	5	0	0	1	0	0	166		
0:45	0	25	2	0	0	0	0	0	0	0	0	0	0	27	12:45	0	186	21	0	7	2	0	1	3	0	2	223		
1:00	0	21	0	0	2	1	0	1	0	0	0	0	0	25	13:00	1	166	27	2	4	4	2	1	1	0	0	209		
1:15	0	24	1	0	0	0	0	3	0	0	0	0	0	28	13:15	0	160	22	0	6	7	0	0	0	0	0	195		
1:30	0	14	1	0	1	0	0	1	0	0	0	0	0	17	13:30	1	192	18	0	2	1	0	0	1	0	3	219		
1:45	0	23	5	0	0	0	0	1	1	0	0	0	0	30	13:45	0	197	20	0	5	2	1	0	2	0	0	227		
2:00	0	17	4	0	3	0	0	0	0	0	0	0	0	24	14:00	0	200	25	1	2	5	0	0	0	1	0	235		
2:15	0	16	1	0	0	0	0	0	0	0	0	0	0	17	14:15	0	218	27	0	10	7	0	0	0	1	0	264		
2:30	0	17	4	0	0	0	0	0	1	0	0	0	0	22	14:30	0	318	31	0	9	3	0	0	0	0	2	363		
2:45	0	17	3	0	0	0	0	0	0	0	0	0	0	20	14:45	2	290	29	0	7	10	2	2	1	0	0	345		
3:00	0	17	2	0	1	0	0	0	0	0	0	0	0	20	15:00	1	295	20	5	6	8	1	0	1	0	0	337		
3:15	0	15	1	0	0	0	0	0	1	0	0	0	0	17	15:15	2	264	24	1	15	11	2	0	1	0	0	320		
3:30	0	14	1	1	2	0	0	0	0	0	0	0	0	18	15:30	1	269	21	0	3	4	1	1	1	0	2	303		
3:45	0	23	1	0	1	0	0	0	0	0	0	0	0	25	15:45	1	266	20	0	6	6	1	0	0	1	2	306		
4:00	0	12	4	0	3	1	0	1	0	0	0	0	0	21	16:00	0	265	35	1	5	6	0	0	1	1	1	318		
4:15	0	23	3	0	2	0	0	1	0	0	0	0	0	29	16:15	1	299	25	2	10	7	1	0	0	0	1	346		
4:30	0	18	3	0	3	1	0	1	0	1	0	0	0	27	16:30	0	302	27	0	4	10	0	0	2	0	0	346		
4:45	0	45	6	0	3	1	0	1	0	0	0	0	0	56	16:45	0	297	25	1	6	8	1	2	1	0	0	343		
5:00	0	53	8	1	1	0	0	1	0	0	0	0	0	64	17:00	0	294	33	0	7	11	1	1	0	0	2	349		
5:15	0	50	4	0	4	2	0	0	0	0	0	0	0	60	17:15	0	310	22	1	3	5	1	0	0	0	1	345		
5:30	0	68	5	0	6	3	0	0	0	0	1	0	0	83	17:30	2	282	18	0	4	1	0	0	0	0	0	307		
5:45	0	42	17	1	9	6	0	1	1	0	0	0	1	78	17:45	0	280	19	2	5	4	0	0	2	0	0	313		
6:00	0	70	6	1	5	3	0	1	2	0	0	0	0	88	18:00	0	262	23	0	12	2	0	1	1	0	0	301		
6:15	0	94	13	0	6	4	0	0	1	0	0	0	1	119	18:15	1	194	27	1	6	6	1	1	0	0	0	237		
6:30	0	133	18	0	7	8	0	0	2	0	1	0	1	170	18:30	0	225	20	1	4	5	1	0	1	0	0	257		
6:45	0	159	17	2	7	1	0	1	2	0	0	1	1	191	18:45	0	205	23	1	4	6	0	0	1	1	0	241		
7:00	0	243	16	0	11	7	0	0	1	0	0	1	1	280	19:00	1	178	20	0	2	4	0	0	1	0	0	207		
7:15	2	298	24	1	4	6	3	1	1	0	0	1	2	343	19:15	0	148	14	0	6	1	0	0	0	0	0	169		
7:30	1	272	23	0	8	4	1	0	0	1	0	1	0	311	19:30	1	146	12	1	3	6	0	1	0	0	0	170		
7:45	0	226	21	0	8	3	1	0	1	0	0	0	0	260	19:45	0	110	7	0	2	3	0	0	1	0	0	123		
8:00	0	199	20	1	8	4	1	2	0	0	1	0	1	237	20:00	0	118	10	0	2	1	0	1	1	0	0	133		
8:15	0	188	19	1	5	1	1	0	1	0	0	0	0	216	20:15	0	125	10	0	5	1	0	0	0	0	1	142		
8:30	1	191	20	0	8	6	0	1	0	0	2	0	1	230	20:30	1	89	8	0	3	1	0	0	0	0	0	102		
8:45	0	181	20	2	7	2	0	0	1	0	0	0	1	215	20:45	0	98	7	1	1	0	0	0	1	0	0	109		
9:00	0	115	20	1	5	2	1	0	0	0	1	0	0	145	21:00	0	123	9	0	2	3	0	0	0	0	0	137		
9:15	0	122	23	1	15	4	0	0	0	0	0	0	0	165	21:15	0	106	10	2	1	2	0	0	0	0	0	121		
9:30	0	146	23	0	14	1	0	1	1	0	0	0	2	188	21:30	0	98	13	1	0	5	0	0	0	0	0	117		
9:45	0	148	17	2	8	2	0	1	1	0	0	1	0	180	21:45	0	91	9	2	2	0	0	0	0	0	0	104		
10:00	0	118	19	0	13	2	0	0	2	0	1	0	2	157	22:00	0	75	6	0	0	0	0	0	0	0	0	0	81	
10:15	0	149	17	1	4	2	0	2	1	0	2	0	0	178	22:15	0	89	5	3	2	0	0	0	1	0	1	101		
10:30	0	135	19	0	7	3	1	0	0	0	0	0	1	166	22:30	0	80	2	0	1	1	0	0	0	0	0	84		
10:45	0	115	16	2	8	0	0	1	4	0	0	0	0	146	22:45	0	82	4	0	2	1	0	0	0	0	0	89		
11:00	0	153	19	1	10	2	0	1	1	0	0	1	0	188	23:00	0	57	4	0	0	1	0	0	1	0	0	63		
11:15	0	157	23	0	7	1	1	2	0	0	0	0	0	191	23:15	0	48	3	0	0	0	0	0	0	0	0	51		
11:30	1	144	22	0	7	3	0	2	2	0	0	0	1	182	23:30	0	48	5	1	2	1	0	1	0	1	0	60		
11:45	1	151	18	1	7	7	1	0	0	0	0	0	0	186	23:45	0	44	5	0	0	0	0	0	1	0	0	50		
TOTAL	6	4,553	533	20	230	93	11	29	29	0	11	6	17	5,538	TOTAL	16	8,649	829	31	204	182	16	18	29	5	9	16	17	10,021

AM PEAK HOUR 7:00 AM
AM PEAK VOLUME 1,194

PM PEAK HOUR 4:15 PM
PM PEAK VOLUME 1,384

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	22	13,202	1,362	51	434	275	27	47	58	5	20	22	34	15,559
% OF TOTAL	0.1%	84.9%	8.8%	0.3%	2.8%	1.8%	0.2%	0.3%	0.4%	0.0%	0.1%	0.1%	0.2%	100.0%

Class	1	2	3	4	5	6	7	8	9	10	11	12	13	
TOTAL: ALL	45	26,053	2,996	137	1,032	505	71	102	108	8	44	44	52	31,197
% OF TOTAL	0.3%	167.4%	19.3%	0.9%	6.6%	3.2%	0.5%	0.7%	0.7%	0.1%	0.3%	0.3%	0.3%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

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

DATE: Tuesday, January 22, 2019
JOB #: SC2048

LOCATION#
CLASS17 Ethanac between Menifee and Briggs

AM TIME	WESTBOUND													TOTAL	PM Time	WESTBOUND													TOTAL	
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13		
0:00	0	13	1	0	0	1	0	0	0	0	0	0	0	15	12:00	0	159	19	2	4	6	0	0	1	1	2	1	0	195	
0:15	0	28	5	0	0	0	0	0	0	0	0	0	0	33	12:15	1	187	20	2	9	6	0	1	2	0	0	1	0	229	
0:30	0	10	3	0	1	0	0	1	0	0	0	0	0	15	12:30	0	161	15	1	10	0	0	2	0	0	0	0	0	189	
0:45	0	12	4	1	2	0	0	1	0	0	0	0	0	20	12:45	0	191	14	2	8	4	2	0	0	0	1	0	0	222	
1:00	0	11	2	0	0	0	0	0	0	0	0	0	0	13	13:00	0	146	15	2	5	2	0	1	0	1	1	0	0	173	
1:15	0	14	0	0	0	0	0	0	0	0	0	0	0	14	13:15	2	206	32	2	13	3	0	2	2	0	2	0	0	264	
1:30	0	9	2	0	0	0	0	0	0	0	0	0	0	11	13:30	0	180	21	2	4	2	0	3	0	0	2	1	2	217	
1:45	0	21	2	1	1	0	0	0	1	0	0	1	0	27	13:45	0	157	26	2	11	4	1	1	0	0	0	0	0	202	
2:00	0	22	4	0	0	0	0	0	0	0	0	0	0	26	14:00	1	162	22	2	10	3	1	3	1	1	0	0	0	206	
2:15	0	22	5	0	0	0	0	0	0	0	0	0	0	27	14:15	1	196	24	0	7	3	1	3	3	0	1	0	1	240	
2:30	1	26	6	0	1	0	0	0	0	0	0	0	0	34	14:30	0	191	18	1	13	1	0	3	2	0	0	0	0	229	
2:45	0	27	6	0	2	0	0	1	0	0	0	0	0	36	14:45	0	165	28	1	4	4	4	1	1	0	0	0	3	0	211
3:00	0	32	6	1	2	0	0	0	1	0	0	0	0	42	15:00	0	172	30	0	9	3	0	3	2	0	1	1	1	222	
3:15	1	47	8	1	3	0	0	0	1	0	0	0	0	61	15:15	1	246	19	0	4	2	2	0	1	0	1	0	3	279	
3:30	0	79	15	0	7	0	0	1	0	0	0	0	0	102	15:30	0	244	26	1	11	8	4	1	1	0	0	3	0	299	
3:45	0	72	25	1	9	0	0	0	0	0	0	0	0	107	15:45	0	211	13	1	10	2	3	0	0	0	0	0	1	241	
4:00	2	70	20	3	5	0	0	0	0	0	0	0	0	100	16:00	0	212	29	0	10	5	0	1	0	0	0	0	0	257	
4:15	0	142	36	0	11	2	0	0	0	0	0	0	0	191	16:15	0	201	17	1	10	3	1	1	0	0	0	0	0	234	
4:30	0	176	25	2	9	2	0	0	0	0	0	0	0	214	16:30	1	224	23	0	6	3	0	0	1	0	0	2	0	260	
4:45	0	149	19	2	8	7	0	0	0	0	0	0	0	185	16:45	0	234	23	4	14	6	0	1	0	0	0	1	1	284	
5:00	0	152	27	2	14	2	0	0	0	0	0	0	0	197	17:00	0	237	22	0	10	8	1	0	1	0	0	0	0	279	
5:15	1	178	32	1	10	6	0	0	0	0	0	0	0	228	17:15	0	225	26	2	9	8	4	0	1	0	0	1	0	276	
5:30	0	191	43	3	9	5	1	1	0	0	0	0	1	254	17:30	0	227	23	0	7	5	2	0	0	0	0	0	0	264	
5:45	0	173	25	2	14	4	0	1	0	0	1	0	0	220	17:45	1	226	20	0	5	6	1	1	0	0	0	0	0	260	
6:00	0	155	38	3	11	3	1	0	0	0	0	1	0	212	18:00	0	161	26	0	8	6	0	0	1	0	0	0	0	202	
6:15	0	189	22	1	10	4	1	0	0	0	0	0	0	227	18:15	0	152	19	1	10	4	0	1	0	0	1	0	0	188	
6:30	2	181	28	2	10	1	1	0	2	0	0	1	1	229	18:30	1	141	13	1	10	3	1	1	0	0	0	0	0	171	
6:45	0	226	30	0	7	5	0	0	2	0	0	0	0	270	18:45	0	122	19	2	4	0	0	0	0	0	0	0	0	147	
7:00	0	252	21	4	5	2	2	0	0	0	2	0	2	290	19:00	0	95	13	0	2	1	0	1	0	0	0	0	0	0	112
7:15	0	267	19	1	6	6	1	0	1	0	1	1	0	303	19:15	0	106	14	2	2	1	0	0	0	0	0	0	0	0	125
7:30	0	285	21	0	9	5	3	0	2	0	0	0	2	327	19:30	0	126	8	1	9	0	0	0	0	0	0	0	0	0	144
7:45	1	290	13	0	5	3	0	0	2	0	0	0	0	314	19:45	0	108	14	2	6	2	1	0	0	0	0	0	0	0	133
8:00	0	250	18	2	8	6	1	1	0	0	0	0	0	286	20:00	0	85	8	0	2	2	0	0	1	0	0	0	0	0	98
8:15	0	226	33	0	4	1	0	1	1	0	0	0	0	266	20:15	0	83	13	1	3	1	0	1	0	0	0	0	0	0	102
8:30	1	238	21	1	8	2	0	0	0	0	2	0	0	273	20:30	0	79	14	0	3	1	0	0	0	0	0	0	0	0	97
8:45	0	223	18	0	12	3	1	1	1	0	0	0	1	260	20:45	0	45	11	0	5	0	1	1	1	0	1	0	0	0	65
9:00	0	145	16	1	7	2	0	1	2	0	0	0	1	175	21:00	0	62	15	1	4	0	0	0	0	0	0	0	0	0	82
9:15	0	162	24	0	10	2	0	0	0	0	0	0	0	198	21:15	0	49	7	0	4	0	0	1	0	0	0	0	0	0	61
9:30	0	159	17	1	16	2	1	1	1	0	0	0	0	198	21:30	0	57	9	0	2	1	0	0	0	0	0	0	0	0	69
9:45	1	175	30	0	6	4	0	1	1	0	0	1	0	219	21:45	1	61	6	0	3	0	0	0	0	0	1	0	0	0	72
10:00	0	138	33	0	5	0	0	0	0	0	0	0	0	176	22:00	0	36	6	1	1	1	0	0	0	0	0	0	0	0	45
10:15	2	130	22	2	12	4	0	1	1	0	0	0	0	174	22:15	0	53	5	0	1	1	0	0	0	0	0	0	0	0	60
10:30	0	151	25	1	10	6	0	1	1	0	1	0	1	197	22:30	0	35	3	0	0	0	0	0	0	0	0	0	0	0	38
10:45	1	155	26	1	11	4	0	1	3	0	1	0	0	203	22:45	0	37	3	0	3	0	0	0	1	0	0	0	0	0	44
11:00	0	167	20	1	7	3	0	0	1	0	0	0	0	199	23:00	0	36	2	0	0	1	0	1	0	0	0	0	0	0	40
11:15	0	137	17	0	7	3	0	2	0	0	0	0	0	166	23:15	0	31	4	0	1	0	0	0	0	0	1	0	0	0	37
11:30	0	145	17	1	9	6	0	1	1	0	1	2	0	183	23:30	0	35	5	0	0	0	0	0	0	0	0	0	0	0	40
11:45	0	146	18	4	9	2	1	2	1	0	0	1	0	184	23:45	0	28	4	0	0	0	0	0	1	0	0	0	0	0	33
TOTAL	13	6,268	868	46	312	108	14	20	26	0	9	8	9	7,701	TOTAL	10	6,583	766	40	286	122	30	35	24	3	15	14	9	7,937	

AM PEAK HOUR 7:00 AM
AM PEAK VOLUME 1,234

PM PEAK HOUR 4:45 PM
PM PEAK VOLUME 1,103

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	23	###	1,634	86	598	230	44	55	50	3	24	22	18	15,638
% OF TOTAL	0.1%	82.2%	10.4%	0.5%	3.8%	1.5%	0.3%	0.4%	0.3%	0.0%	0.2%	0.1%	0.1%	100.0%

Class **1** **2** **3** **4** **5** **6** **7** **8** **9** **10** **11** **12** **13**

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

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

DATE: Tuesday, January 22, 2019
JOB #: SC2048

LOCATION#
CLASS6 Ethanac between Murrieta and Barnett

AM TIME	EASTBOUND													TOTAL	PM Time	EASTBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	1	9	0	0	0	0	0	0	0	0	0	0	0	10	12:00	24	80	6	0	6	2	1	0	0	0	0	0	0	119
0:15	0	6	1	0	1	0	0	0	0	0	0	0	0	8	12:15	6	61	6	0	4	8	0	0	1	0	0	1	0	87
0:30	0	5	0	0	0	0	0	0	0	0	0	0	0	5	12:30	8	62	11	0	3	5	0	0	0	0	1	0	90	
0:45	0	3	0	0	1	0	0	0	0	0	0	0	0	4	12:45	18	57	6	0	4	6	0	0	0	0	0	0	91	
1:00	1	5	0	0	0	0	0	0	0	0	0	0	0	6	13:00	10	74	11	0	5	3	0	0	0	0	0	1	104	
1:15	1	6	0	0	0	0	0	0	0	0	0	0	0	7	13:15	20	58	6	0	5	6	0	0	0	0	0	1	96	
1:30	1	5	0	0	0	0	0	0	0	0	0	0	0	6	13:30	18	105	9	0	3	7	0	0	2	0	0	1	145	
1:45	1	6	1	0	0	0	0	0	0	0	0	0	0	8	13:45	15	80	9	0	3	8	1	0	3	0	0	1	120	
2:00	0	6	1	0	2	0	0	0	0	0	0	0	0	9	14:00	18	102	7	0	2	2	0	0	0	1	0	0	132	
2:15	1	4	0	0	1	0	0	0	0	0	0	0	0	6	14:15	25	102	6	0	8	11	0	1	0	0	0	0	153	
2:30	0	5	2	0	0	0	0	0	1	0	0	0	0	8	14:30	17	107	8	0	3	6	0	1	2	0	0	0	144	
2:45	3	4	0	0	1	0	0	1	0	0	0	0	0	9	14:45	21	86	10	0	7	12	0	1	4	0	0	0	141	
3:00	1	1	2	0	2	0	0	0	0	0	0	0	0	6	15:00	19	97	6	0	10	5	1	0	0	0	0	1	139	
3:15	1	9	1	0	0	0	0	0	0	0	0	0	0	11	15:15	18	91	9	0	4	4	1	0	0	0	0	0	127	
3:30	2	13	2	0	1	1	0	0	0	0	0	0	0	19	15:30	15	78	10	0	4	2	1	0	0	0	0	1	111	
3:45	1	21	2	0	1	0	0	0	0	0	0	0	0	25	15:45	11	77	8	1	6	4	0	0	0	1	0	1	109	
4:00	3	26	9	0	4	0	0	1	1	0	0	0	0	44	16:00	18	78	5	0	4	4	0	1	1	0	0	0	111	
4:15	8	28	9	0	2	0	0	0	0	0	0	0	0	47	16:15	20	97	8	0	4	2	0	0	0	0	0	0	131	
4:30	2	40	13	0	4	0	0	0	1	0	0	0	0	60	16:30	10	86	13	0	3	5	0	0	3	0	0	1	121	
4:45	5	47	3	0	4	0	0	0	0	0	1	1	0	61	16:45	10	87	9	1	3	0	0	0	1	0	0	0	111	
5:00	3	32	11	0	8	3	0	0	0	0	0	0	0	57	17:00	12	99	13	0	3	1	0	0	0	0	0	0	128	
5:15	8	46	11	0	8	1	0	0	0	0	0	0	0	74	17:15	11	93	10	0	6	0	1	0	1	0	0	0	122	
5:30	5	59	6	0	14	7	0	0	0	0	0	0	0	91	17:30	10	87	8	0	2	4	1	0	0	0	0	0	112	
5:45	6	48	10	0	8	3	0	1	0	0	0	0	0	76	17:45	12	71	9	0	7	1	0	0	0	0	0	0	100	
6:00	9	45	7	0	5	5	1	0	1	0	0	0	0	73	18:00	3	56	11	0	5	2	1	0	0	0	0	0	0	78
6:15	7	64	16	3	6	3	0	0	1	0	0	0	1	101	18:15	10	44	7	0	2	4	0	0	2	0	0	0	0	69
6:30	14	73	12	0	4	4	0	1	2	0	0	1	0	111	18:30	5	52	7	0	1	0	0	0	0	0	0	0	0	65
6:45	12	111	12	0	8	3	2	1	1	0	0	0	0	150	18:45	7	57	6	0	3	2	0	0	0	0	0	0	0	75
7:00	22	164	8	2	6	5	0	0	1	0	1	0	0	209	19:00	3	46	8	0	3	2	0	0	1	0	0	0	0	63
7:15	16	138	10	0	8	3	1	0	0	0	0	0	0	176	19:15	4	35	5	0	2	1	0	0	0	0	0	0	0	47
7:30	14	156	9	0	2	5	1	0	0	0	0	0	0	187	19:30	6	33	5	0	4	0	0	0	1	0	0	0	0	49
7:45	5	125	12	0	3	2	1	0	0	0	0	0	0	148	19:45	8	35	4	0	2	0	0	0	0	0	0	0	0	51
8:00	8	104	9	0	7	0	4	0	0	0	0	0	1	133	20:00	1	38	4	0	2	0	0	0	0	0	0	0	0	45
8:15	14	130	11	0	8	2	0	0	0	0	1	0	1	167	20:15	3	26	4	1	1	0	0	0	0	0	0	0	0	35
8:30	15	91	13	0	7	2	0	0	2	0	0	0	0	130	20:30	4	25	7	0	1	0	0	0	0	0	0	0	0	37
8:45	6	81	14	1	7	1	2	0	1	0	0	0	0	113	20:45	2	29	3	0	0	0	0	0	0	0	0	0	0	34
9:00	8	60	15	1	5	4	0	0	0	0	0	0	0	93	21:00	5	25	4	0	3	0	0	0	0	0	0	0	0	37
9:15	13	52	8	1	4	5	1	0	0	0	0	0	0	84	21:15	4	27	3	0	2	0	0	0	0	0	0	0	0	36
9:30	13	56	4	0	6	5	0	0	0	0	0	0	1	85	21:30	1	21	3	0	3	0	0	0	0	0	0	0	0	28
9:45	7	53	6	1	5	3	0	0	0	0	0	0	0	75	21:45	1	18	4	0	1	0	0	0	0	0	0	0	0	24
10:00	11	63	5	0	11	1	0	1	1	0	0	0	0	93	22:00	1	12	2	0	0	0	0	0	0	0	0	0	0	15
10:15	11	64	6	0	2	3	0	0	1	1	0	0	0	88	22:15	1	13	1	0	0	0	0	0	0	0	0	0	0	15
10:30	15	64	6	0	5	5	0	1	1	0	0	0	0	97	22:30	4	11	1	0	1	0	0	0	0	0	0	0	0	17
10:45	11	56	4	0	1	6	1	0	0	0	0	0	0	79	22:45	0	13	3	0	0	0	0	0	0	0	0	0	0	16
11:00	10	70	4	0	6	4	0	0	1	1	0	0	0	96	23:00	0	9	1	0	1	0	0	0	0	0	0	0	0	11
11:15	11	63	5	2	4	2	0	2	0	0	0	0	0	89	23:15	1	5	2	0	1	0	0	0	0	0	0	0	0	9
11:30	18	84	6	0	4	4	0	0	1	0	0	0	0	117	23:30	1	9	2	0	1	0	0	0	0	0	0	0	0	13
11:45	20	84	5	0	3	3	5	1	1	0	0	0	0	122	23:45	3	7	0	0	0	0	0	0	0	0	0	0	0	10
TOTAL	344	2,485	291	11	189	95	19	10	17	3	3	2	4	3,473	TOTAL	444	2,661	300	3	150	119	8	4	22	2	0	8	2	3,723

AM PEAK HOUR 6:45 AM
AM PEAK VOLUME 722

PM PEAK HOUR 2:15 PM
PM PEAK VOLUME 577

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	788	5,146	591	14	339	214	27	14	39	5	3	10	6	7,196
% OF TOTAL	11.0%	71.5%	8.2%	0.2%	4.7%	3.0%	0.4%	0.2%	0.5%	0.1%	0.0%	0.1%	0.1%	100.0%

Class	1	2	3	4	5	6	7	8	9	10	11	12	13	
TOTAL: ALL	807	10,851	1,601	54	923	299	65	35	66	5	10	13	8	14,737
% OF TOTAL	11.2%	150.8%	22.2%	0.8%	12.8%	4.2%	0.9%	0.5%	0.9%	0.1%	0.1%	0.2%	0.1%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

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

DATE: Tuesday, January 22, 2019
JOB #: SC2048

LOCATION#
CLASS6 Ethanac between Murrieta and Barnett

AM TIME	WESTBOUND													TOTAL	PM Time	WESTBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	14	3	0	1	0	0	0	0	0	0	0	0	18	12:00	0	64	19	0	4	2	0	0	0	0	0	89		
0:15	0	11	1	0	0	0	0	0	1	0	0	0	0	13	12:15	0	79	16	0	10	3	3	0	0	0	0	111		
0:30	1	10	0	0	0	0	0	0	0	0	0	0	0	11	12:30	0	56	8	0	12	2	0	1	0	0	0	79		
0:45	0	10	2	0	1	0	0	0	0	0	0	0	0	13	12:45	0	75	12	1	5	2	1	0	1	0	0	97		
1:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5	13:00	0	72	14	1	6	1	2	1	0	0	0	97		
1:15	0	8	0	0	0	0	0	0	0	0	0	0	0	8	13:15	0	77	15	1	10	1	1	0	1	0	0	106		
1:30	0	10	1	0	0	0	0	0	0	0	0	0	0	11	13:30	0	84	9	0	11	1	0	2	1	0	1	110		
1:45	0	8	0	0	0	0	0	0	0	0	0	0	0	8	13:45	0	74	13	0	4	0	0	1	1	0	0	93		
2:00	0	6	1	0	1	1	0	0	0	0	0	0	0	9	14:00	0	69	17	1	10	1	2	0	0	0	0	100		
2:15	0	3	0	0	2	0	0	1	0	0	0	0	0	6	14:15	0	93	9	0	8	1	0	0	2	0	0	113		
2:30	0	6	0	0	1	0	0	0	0	0	0	0	0	7	14:30	0	130	18	0	6	1	0	0	1	0	0	157		
2:45	0	6	0	0	0	0	0	0	0	0	0	0	0	6	14:45	0	129	15	0	17	1	0	0	0	0	0	162		
3:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4	15:00	2	108	22	0	8	3	0	1	2	0	0	146		
3:15	0	6	3	0	0	0	0	0	0	0	0	0	0	9	15:15	2	133	25	2	8	3	0	1	0	0	1	175		
3:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4	15:30	1	100	25	1	7	1	0	1	2	0	1	139		
3:45	0	10	3	0	0	0	0	0	0	0	0	0	0	13	15:45	0	126	21	2	10	1	0	1	0	0	0	161		
4:00	0	8	3	0	0	0	0	0	0	0	0	0	0	11	16:00	1	108	23	0	11	0	3	0	0	0	0	147		
4:15	0	9	1	0	1	0	0	0	0	0	0	0	0	11	16:15	0	121	15	0	12	1	2	0	0	0	0	151		
4:30	0	12	0	0	1	0	0	0	0	0	0	0	0	13	16:30	0	113	16	1	12	3	2	1	0	0	0	148		
4:45	0	12	2	1	5	0	0	0	0	0	0	0	0	20	16:45	0	119	15	1	13	0	2	1	0	0	0	151		
5:00	0	18	0	0	0	0	0	0	0	0	0	0	0	18	17:00	0	112	18	1	9	2	2	0	0	0	0	144		
5:15	0	16	3	0	1	0	0	0	0	0	0	0	0	20	17:15	0	102	32	1	7	2	4	0	0	0	0	148		
5:30	0	10	5	0	7	0	0	0	0	0	0	0	0	22	17:30	0	103	28	1	9	0	2	0	0	0	0	143		
5:45	0	16	3	0	5	0	0	0	0	0	0	0	0	24	17:45	0	106	16	0	13	1	0	0	0	0	0	136		
6:00	0	26	13	1	7	0	0	0	0	0	0	0	0	47	18:00	0	119	24	1	9	0	0	1	0	0	0	154		
6:15	0	26	11	0	6	0	0	0	2	0	0	0	0	45	18:15	0	105	20	0	8	3	0	0	0	0	0	136		
6:30	0	34	9	1	11	5	0	0	0	0	0	0	0	60	18:30	0	95	21	0	7	1	0	0	0	0	0	124		
6:45	0	54	5	0	9	3	1	0	0	0	0	0	0	72	18:45	0	90	14	0	2	0	0	0	1	0	0	107		
7:00	0	117	15	0	21	2	1	0	0	0	0	0	0	156	19:00	0	98	10	0	3	1	0	0	0	0	0	112		
7:15	0	140	25	0	20	2	0	2	0	0	1	0	0	190	19:15	0	88	10	0	4	2	0	0	0	0	0	104		
7:30	1	197	21	0	18	4	0	0	0	0	1	0	0	242	19:30	0	61	7	0	4	0	0	0	1	0	0	73		
7:45	1	176	21	1	20	4	0	0	0	0	0	0	0	223	19:45	0	67	9	0	3	0	0	0	0	0	0	79		
8:00	0	134	22	1	11	2	0	1	1	0	0	0	0	172	20:00	0	75	11	1	3	0	0	0	0	0	0	90		
8:15	1	102	25	1	12	1	0	0	0	0	1	0	0	143	20:15	1	56	6	1	6	0	0	0	0	0	0	70		
8:30	0	90	7	2	10	0	0	0	2	0	0	0	0	111	20:30	0	52	6	3	4	0	0	0	0	0	0	65		
8:45	0	81	11	0	10	3	1	0	1	0	1	0	0	108	20:45	0	40	6	0	4	0	0	0	0	0	0	50		
9:00	0	49	12	2	9	2	0	0	0	0	0	0	0	74	21:00	0	50	10	2	3	0	0	1	0	0	0	66		
9:15	0	44	18	0	9	1	1	1	1	0	0	0	0	75	21:15	1	48	11	1	3	0	0	0	0	0	0	64		
9:30	1	41	9	2	5	1	1	0	0	0	0	0	0	60	21:30	0	42	8	1	2	0	0	0	0	0	0	53		
9:45	1	54	15	1	13	2	1	1	1	0	0	0	0	89	21:45	1	34	3	0	3	0	0	0	0	0	0	41		
10:00	1	50	16	0	5	0	0	0	1	0	0	0	0	73	22:00	0	32	5	0	3	1	0	0	0	0	0	41		
10:15	0	50	14	1	6	1	1	0	1	0	0	0	0	74	22:15	0	46	2	0	1	0	0	0	0	0	0	49		
10:30	0	49	18	0	12	3	0	0	1	0	0	0	0	83	22:30	0	21	2	0	2	0	0	0	0	0	0	25		
10:45	0	55	18	2	7	2	2	0	0	0	0	0	0	86	22:45	0	24	4	0	3	1	0	0	0	0	0	32		
11:00	2	44	12	0	9	0	0	0	0	0	1	0	0	68	23:00	0	26	3	0	1	0	0	0	0	0	0	30		
11:15	0	56	13	0	8	2	1	0	0	0	0	0	0	80	23:15	0	20	5	0	0	0	0	0	0	0	0	25		
11:30	0	75	9	0	4	1	1	1	0	0	0	0	0	91	23:30	1	9	1	0	0	0	0	0	0	0	0	11		
11:45	0	66	20	0	14	1	1	0	1	0	0	1	0	104	23:45	0	22	1	0	2	0	0	1	1	0	0	27		
TOTAL	9	2,032	390	16	282	43	12	7	13	0	4	2	0	2,810	TOTAL	10	3,673	620	24	302	42	26	14	14	0	3	1	2	4,731

AM PEAK HOUR 7:15 AM
AM PEAK VOLUME 827

PM PEAK HOUR 2:30 PM
PM PEAK VOLUME 640

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	19	5,705	1,010	40	584	85	38	21	27	0	7	3	2	7,541
% OF TOTAL	0.3%	75.7%	13.4%	0.5%	7.7%	1.1%	0.5%	0.3%	0.4%	0.0%	0.1%	0.0%	0.0%	100.0%

Class **1** **2** **3** **4** **5** **6** **7** **8** **9** **10** **11** **12** **13**

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

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

DATE: Tuesday, January 22, 2019
JOB #: SC2048

LOCATION#
CLASS18 Ethanac between Case and I-215 SB Ramps

AM TIME	EASTBOUND													TOTAL	PM Time	EASTBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	19	0	0	0	0	0	0	0	0	0	0	0	19	12:00	0	137	16	0	15	3	1	0	1	0	0	0	173	
0:15	0	12	1	0	0	0	0	0	0	0	0	0	0	13	12:15	0	158	27	0	8	4	0	1	2	0	0	0	200	
0:30	0	7	2	0	1	0	0	0	1	0	0	0	0	11	12:30	2	126	14	0	10	7	0	0	3	0	0	1	163	
0:45	0	13	1	0	0	0	0	0	0	0	0	0	0	14	12:45	0	124	16	1	7	4	0	1	1	0	1	0	155	
1:00	0	12	1	0	1	0	0	0	0	0	0	0	0	14	13:00	0	128	19	1	14	3	0	0	1	0	0	0	168	
1:15	0	13	1	0	0	0	0	1	0	0	0	0	0	15	13:15	0	158	18	0	9	4	0	0	2	0	0	1	192	
1:30	0	14	4	0	0	0	0	0	0	1	0	0	0	19	13:30	1	158	20	0	14	4	1	0	1	0	0	0	201	
1:45	0	8	6	0	0	0	0	0	0	0	0	0	0	14	13:45	0	186	19	0	6	1	2	0	1	0	0	0	216	
2:00	0	11	1	0	1	0	0	0	0	1	0	0	0	14	14:00	0	167	17	0	13	5	0	0	4	0	1	0	207	
2:15	0	6	1	0	0	0	0	0	1	1	0	0	0	9	14:15	0	165	18	1	8	5	1	0	0	0	0	2	200	
2:30	0	10	1	0	0	0	0	0	0	1	0	0	0	12	14:30	0	163	19	1	11	1	1	0	0	0	0	0	196	
2:45	0	8	4	0	1	0	0	0	1	0	0	0	0	14	14:45	0	174	20	2	10	4	0	0	2	0	1	1	214	
3:00	0	6	5	0	4	0	0	1	0	0	0	0	0	16	15:00	0	159	14	0	11	4	2	0	2	0	1	0	194	
3:15	0	13	3	0	1	0	0	0	0	0	0	0	0	17	15:15	0	159	19	0	11	1	1	1	0	0	0	0	192	
3:30	0	29	3	0	1	0	0	0	0	0	0	0	0	33	15:30	0	155	25	0	11	5	0	1	0	0	0	0	197	
3:45	0	29	2	1	1	0	0	0	0	0	0	0	0	33	15:45	0	140	21	1	6	11	0	0	0	0	1	0	2	182
4:00	1	37	6	0	5	0	1	0	4	0	0	0	0	54	16:00	0	165	12	0	6	3	1	1	1	0	0	0	189	
4:15	0	28	12	0	7	0	1	0	1	0	0	0	0	49	16:15	1	179	17	1	10	5	0	0	1	0	0	0	215	
4:30	0	57	14	0	4	0	1	0	0	0	0	0	0	76	16:30	0	193	25	0	6	1	1	1	1	0	0	2	230	
4:45	0	52	16	0	3	3	0	0	0	0	1	0	0	75	16:45	0	174	12	1	4	2	1	0	1	0	1	0	196	
5:00	0	53	7	0	9	2	0	0	1	0	0	0	0	72	17:00	1	171	20	1	11	3	1	0	0	0	0	0	208	
5:15	1	58	16	0	11	2	0	0	2	0	0	0	0	90	17:15	0	171	19	0	9	3	0	0	0	1	0	0	1	204
5:30	1	83	12	0	9	9	0	1	2	0	1	0	0	118	17:30	0	171	15	0	9	5	3	0	0	0	0	0	203	
5:45	2	76	10	0	12	5	1	1	3	1	0	0	0	111	17:45	0	141	14	0	10	4	0	0	1	0	1	0	171	
6:00	0	60	16	0	13	3	1	1	4	0	0	1	1	100	18:00	0	132	13	0	9	3	1	0	0	0	0	0	158	
6:15	0	85	19	3	6	6	1	0	2	0	1	0	0	123	18:15	0	112	13	0	5	0	2	0	1	0	0	0	133	
6:30	0	133	15	2	14	7	0	1	2	0	0	0	0	174	18:30	0	106	14	1	6	0	1	1	0	1	0	0	130	
6:45	1	127	22	1	16	5	1	2	2	0	0	0	1	178	18:45	1	113	15	0	7	1	1	2	1	0	0	1	142	
7:00	0	189	17	0	8	2	1	1	4	0	0	1	3	226	19:00	0	110	14	0	9	2	0	0	3	0	0	0	138	
7:15	1	173	27	4	12	3	2	2	1	0	0	1	2	228	19:15	0	90	16	0	6	1	0	0	0	0	0	0	113	
7:30	1	183	17	0	7	9	0	1	0	0	1	1	0	220	19:30	0	86	6	0	5	1	0	0	1	0	0	0	99	
7:45	0	160	18	0	11	4	1	0	1	0	0	0	1	196	19:45	1	70	6	0	3	0	0	0	0	0	0	0	1	81
8:00	1	144	20	1	11	3	1	0	2	0	2	1	0	186	20:00	0	73	7	0	3	0	1	0	1	0	0	0	85	
8:15	0	170	14	0	9	7	0	0	2	0	0	0	0	202	20:15	0	76	10	0	2	1	0	0	0	0	0	0	89	
8:30	0	146	23	1	10	2	0	0	3	0	0	1	3	189	20:30	0	44	11	0	4	0	0	0	1	1	0	0	61	
8:45	0	135	20	0	9	5	1	1	1	0	2	0	1	175	20:45	0	49	8	0	2	1	0	0	0	0	0	0	1	61
9:00	1	104	21	0	12	6	0	0	0	0	0	0	0	144	21:00	0	59	11	1	3	0	0	0	1	0	0	0	76	
9:15	0	125	17	0	8	4	0	0	2	0	0	0	0	156	21:15	0	53	8	0	1	1	0	0	1	0	0	0	1	65
9:30	0	120	22	3	9	4	0	1	2	1	0	0	0	162	21:30	0	33	6	0	1	1	0	0	0	0	0	0	0	41
9:45	0	109	16	2	10	4	1	0	2	0	0	0	0	144	21:45	0	42	8	0	0	1	0	0	1	0	0	0	0	52
10:00	1	105	20	0	12	5	0	0	2	0	1	1	1	148	22:00	0	34	5	0	0	0	0	0	1	0	0	0	0	40
10:15	0	135	15	2	8	2	1	1	2	0	0	0	0	166	22:15	0	29	2	0	0	0	0	0	0	0	0	0	0	31
10:30	2	120	26	0	13	3	0	1	2	0	0	0	0	167	22:30	0	24	2	0	0	0	0	0	0	0	0	0	0	26
10:45	0	114	15	2	11	4	3	0	1	0	1	0	0	151	22:45	0	16	4	0	0	0	0	0	1	0	0	0	21	
11:00	0	116	13	1	10	3	0	0	2	0	2	0	1	148	23:00	0	22	6	0	0	0	0	0	1	0	0	0	29	
11:15	0	119	24	1	8	2	1	1	5	1	0	0	0	162	23:15	0	20	2	0	1	0	0	0	0	0	0	0	23	
11:30	0	133	24	0	8	6	1	1	0	0	1	0	0	174	23:30	0	14	2	0	1	0	0	0	0	0	0	0	17	
11:45	0	143	9	1	10	5	0	1	5	0	0	1	1	176	23:45	0	21	3	0	0	0	0	0	0	0	0	0	24	
TOTAL	13	3,802	579	25	316	125	20	20	68	3	13	8	15	5,007	TOTAL	7	5,250	628	12	297	105	22	9	39	3	7	9	13	6,401

AM PEAK HOUR
AM PEAK VOLUME 7:00 AM
870

PM PEAK HOUR
PM PEAK VOLUME 4:15 PM
849

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	20	9,052	1,207	37	613	230	42	29	107	6	20	17	28	11,408
% OF TOTAL	0.2%	79.3%	10.6%	0.3%	5.4%	2.0%	0.4%	0.3%	0.9%	0.1%	0.2%	0.1%	0.2%	100.0%

Class	1	2	3	4	5	6	7	8	9	10	11	12	13
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TOTAL: ALL	143	16,496	3,312	117	2,223	392	98	75	179	17	32	45	67	23,196
% OF TOTAL	1.3%	144.6%	29.0%	1.0%	19.5%	3.4%	0.9%	0.7%	1.6%	0.1%	0.3%	0.4%	0.6%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

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

DATE: Tuesday, January 22, 2019
JOB #: SC2048

LOCATION#
CLASS18 Ethanac between Case and I-215 SB Ramps

AM TIME	WESTBOUND													TOTAL	PM Time	WESTBOUND													TOTAL	
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13		
0:00	0	20	5	0	2	0	0	0	0	0	0	0	0	27	12:00	7	105	38	0	26	0	1	1	1	0	0	0	1	180	
0:15	0	12	4	0	1	0	0	0	1	0	0	0	1	19	12:15	6	120	21	2	19	2	2	1	0	0	0	1	2	176	
0:30	0	13	2	0	4	0	0	1	1	0	0	0	0	21	12:30	13	88	35	0	27	4	1	0	1	0	0	1	0	170	
0:45	0	13	4	0	4	0	0	0	0	0	0	0	0	21	12:45	6	99	41	1	23	4	1	0	1	0	0	0	0	176	
1:00	0	9	3	0	1	0	0	0	0	0	0	0	0	13	13:00	1	121	30	2	22	0	2	0	1	1	0	1	0	181	
1:15	0	12	0	0	3	0	0	0	0	0	0	0	0	15	13:15	2	104	26	1	24	3	0	0	1	0	0	0	1	162	
1:30	0	9	3	0	2	0	0	0	1	0	0	0	0	15	13:30	1	99	25	0	26	1	0	2	0	1	0	0	2	157	
1:45	0	7	2	0	1	0	0	0	0	0	0	0	0	10	13:45	2	100	25	3	20	4	1	1	0	1	0	0	1	158	
2:00	0	9	1	0	3	1	0	1	2	0	0	0	0	17	14:00	3	100	32	0	28	2	1	1	1	1	1	1	1	172	
2:15	0	8	3	0	0	0	0	1	0	0	0	0	0	12	14:15	5	117	23	1	25	3	0	0	1	0	1	0	1	177	
2:30	0	7	5	2	1	1	0	0	0	0	0	0	0	16	14:30	2	161	31	0	24	4	1	0	2	0	0	1	1	227	
2:45	0	11	2	0	2	0	0	0	0	0	0	0	0	15	14:45	1	137	31	1	28	5	2	0	0	1	0	1	3	210	
3:00	0	8	1	0	1	0	0	0	0	0	0	0	0	10	15:00	2	146	26	3	26	2	5	2	2	0	0	1	1	216	
3:15	0	10	3	0	4	0	0	0	0	0	0	0	0	17	15:15	1	179	31	2	23	1	2	0	0	0	0	0	0	239	
3:30	0	11	3	0	0	0	0	0	0	0	0	0	0	14	15:30	0	159	41	1	15	6	1	2	1	0	0	0	0	226	
3:45	0	25	4	1	5	0	0	0	1	0	1	0	0	37	15:45	1	171	41	1	27	2	1	0	1	1	0	2	1	249	
4:00	0	14	3	0	4	0	0	0	0	0	0	0	0	21	16:00	4	148	33	1	26	2	2	0	2	0	0	1	1	220	
4:15	0	13	8	0	7	0	0	0	0	0	0	0	0	28	16:15	0	151	29	0	32	4	2	0	0	0	0	0	1	219	
4:30	0	29	5	1	6	0	0	0	0	0	0	0	0	41	16:30	3	145	34	0	21	2	2	0	1	0	0	0	1	209	
4:45	0	27	15	0	12	1	0	0	0	1	0	0	0	56	16:45	1	152	30	0	30	3	1	0	2	0	0	2	0	221	
5:00	1	22	10	0	5	0	0	0	2	0	0	0	1	41	17:00	1	144	35	1	18	2	0	1	0	0	0	1	0	203	
5:15	0	24	11	1	11	0	0	2	3	0	0	0	1	53	17:15	0	156	42	0	30	4	2	1	0	1	1	0	2	239	
5:30	0	37	24	0	11	0	0	0	0	0	0	0	0	72	17:30	1	134	31	1	26	5	1	0	0	0	0	1	0	200	
5:45	0	31	14	0	22	3	0	0	2	0	0	0	2	74	17:45	1	122	40	1	20	4	1	0	0	0	0	1	0	190	
6:00	0	46	16	4	32	0	0	0	0	0	0	0	0	98	18:00	0	132	43	1	23	3	0	0	1	0	0	0	0	203	
6:15	0	46	20	2	32	1	0	3	4	0	0	0	0	108	18:15	0	99	36	3	24	3	0	0	0	0	0	0	1	166	
6:30	1	54	20	2	26	6	0	2	1	0	1	0	1	113	18:30	1	111	28	0	18	1	0	2	2	0	0	0	0	163	
6:45	1	72	22	2	34	4	1	1	1	0	0	0	1	139	18:45	1	112	34	0	9	1	0	0	3	0	0	0	0	160	
7:00	0	136	41	1	44	2	1	1	3	0	0	3	0	232	19:00	0	102	27	0	15	0	0	0	1	1	0	0	0	146	
7:15	0	157	45	1	31	8	1	2	1	0	0	0	1	247	19:15	1	102	20	1	11	0	0	0	0	0	0	0	0	135	
7:30	1	197	46	0	23	5	1	3	0	0	0	0	1	277	19:30	0	85	13	3	10	1	0	1	0	0	0	1	0	114	
7:45	1	220	39	1	25	5	1	2	2	0	0	1	0	297	19:45	1	60	30	0	9	1	0	0	1	0	0	0	0	102	
8:00	2	176	37	2	20	4	1	2	0	1	1	1	0	247	20:00	1	79	33	0	5	0	1	0	0	0	0	0	0	119	
8:15	3	138	34	2	31	1	1	1	2	0	0	1	1	215	20:15	1	58	15	1	11	0	1	0	1	0	0	0	0	88	
8:30	2	121	32	1	29	3	0	0	1	0	2	0	0	191	20:30	0	53	16	4	12	1	0	0	0	0	0	1	0	87	
8:45	3	106	32	4	19	3	3	1	1	0	0	1	0	173	20:45	1	44	16	0	14	0	1	0	0	1	0	0	1	0	78
9:00	0	53	30	2	35	2	0	1	0	0	0	0	0	123	21:00	0	44	25	2	6	0	0	0	1	0	0	0	0	78	
9:15	2	86	21	0	37	3	2	1	1	0	1	1	0	155	21:15	0	52	13	0	10	0	0	0	1	0	0	0	0	76	
9:30	1	74	38	2	33	2	1	0	0	0	1	0	0	152	21:30	0	46	8	0	4	0	0	0	0	0	0	0	0	58	
9:45	4	76	41	1	23	2	0	1	1	0	0	1	0	150	21:45	0	41	15	0	6	0	0	0	0	0	0	0	0	62	
10:00	7	86	26	2	21	2	0	0	3	0	0	0	2	149	22:00	0	43	12	0	1	0	0	0	1	0	0	0	0	57	
10:15	1	71	35	0	22	1	2	0	1	0	0	0	1	134	22:15	0	36	15	0	3	0	0	0	1	0	0	0	0	55	
10:30	2	66	31	2	39	4	1	1	0	0	0	0	0	146	22:30	0	24	10	0	5	0	0	0	1	0	0	0	0	40	
10:45	7	92	28	3	30	3	3	1	1	1	0	0	1	170	22:45	0	23	9	0	7	0	0	0	1	0	0	0	0	40	
11:00	1	99	21	1	26	4	1	1	0	0	0	0	2	156	23:00	0	24	8	0	1	0	0	0	0	0	0	0	0	33	
11:15	5	100	40	0	40	7	1	0	0	0	0	0	1	194	23:15	0	19	11	0	2	0	0	0	0	0	0	0	0	32	
11:30	2	103	35	2	26	2	0	1	1	0	0	0	0	172	23:30	0	15	6	0	0	0	0	0	0	0	0	0	0	21	
11:45	5	108	18	1	24	2	0	0	0	0	2	1	2	163	23:45	0	18	8	0	4	0	0	1	1	0	0	0	0	32	
TOTAL	52	2,864	883	43	814	82	21	30	37	3	9	10	18	4,866	TOTAL	71	4,580	1,222	37	796	80	35	16	35	8	3	18	21	6,922	

AM PEAK HOUR 7:15 AM
AM PEAK VOLUME 1,068

PM PEAK HOUR 3:15 PM
PM PEAK VOLUME 934

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	123	7,444	2,105	80	1,610	162	56	46	72	11	12	28	39	11,788
% OF TOTAL	1.0%	63.1%	17.9%	0.7%	13.7%	1.4%	0.5%	0.4%	0.6%	0.1%	0.1%	0.2%	0.3%	100.0%

Class **1** **2** **3** **4** **5** **6** **7** **8** **9** **10** **11** **12** **13**

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

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

DATE: Tuesday, January 22, 2019
JOB #: SC2048

LOCATION#
CLASS9 Ethanac between I-215 SB Ramps and I-215 NB Ramps

AM TIME	EASTBOUND													TOTAL	PM Time	EASTBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	11	3	0	0	0	0	0	0	0	0	0	0	14	12:00	3	106	12	1	10	2	1	0	1	0	0	1	0	134
0:15	0	13	0	0	0	0	0	0	0	0	0	0	0	13	12:15	5	120	22	0	8	3	0	1	1	0	0	0	158	
0:30	0	5	2	0	1	0	0	0	1	0	0	0	0	8	12:30	4	99	18	0	8	4	0	0	3	0	0	1	136	
0:45	0	11	2	0	0	0	1	0	0	0	0	0	0	13	12:45	8	105	15	1	9	3	0	1	2	0	1	1	142	
1:00	0	12	2	0	1	0	0	0	0	0	0	0	0	15	13:00	6	110	18	1	8	2	0	0	1	0	0	0	145	
1:15	0	11	3	0	0	0	0	1	0	0	0	0	0	15	13:15	4	125	12	0	6	3	0	0	1	0	0	1	150	
1:30	0	11	4	0	0	0	0	0	1	0	0	0	0	16	13:30	10	139	12	0	11	2	1	0	1	0	0	0	175	
1:45	0	7	4	0	0	0	0	0	0	0	0	0	0	11	13:45	11	141	13	0	7	1	2	0	1	1	0	0	175	
2:00	0	10	1	0	1	0	0	0	1	0	0	0	0	12	14:00	6	127	17	0	9	4	0	0	2	0	1	1	165	
2:15	0	5	2	0	0	0	0	1	1	0	0	0	0	8	14:15	13	126	19	1	5	4	1	0	1	0	0	1	168	
2:30	0	10	1	0	0	0	0	0	1	0	0	0	0	11	14:30	15	136	17	1	7	2	1	0	1	0	1	1	179	
2:45	0	10	6	0	1	0	0	0	1	0	0	0	0	16	14:45	14	140	20	1	10	3	0	0	2	1	1	1	191	
3:00	0	4	5	0	2	0	0	1	0	0	0	0	0	11	15:00	16	137	9	0	14	2	2	0	2	0	1	1	182	
3:15	0	11	4	0	1	0	0	0	0	0	0	0	0	15	15:15	6	130	16	1	10	1	1	1	0	0	0	0	164	
3:30	1	27	4	0	1	0	0	0	0	0	0	0	0	32	15:30	11	127	19	0	9	3	0	1	0	0	0	0	167	
3:45	0	21	3	1	2	0	0	0	0	0	0	0	0	26	15:45	8	141	21	1	4	6	0	0	1	0	1	1	182	
4:00	1	22	6	0	3	1	1	1	2	0	0	0	0	35	16:00	12	131	16	0	8	2	1	1	1	0	0	1	170	
4:15	0	18	6	0	4	0	1	0	1	0	0	0	0	28	16:15	14	136	15	1	11	4	0	0	1	0	0	0	181	
4:30	0	37	10	0	3	0	1	0	0	0	0	0	0	50	16:30	9	161	17	0	3	1	1	1	1	0	1	1	192	
4:45	0	43	13	0	2	2	0	0	0	0	1	0	0	60	16:45	7	144	15	1	2	1	1	0	1	0	1	0	170	
5:00	0	42	6	0	7	1	0	0	1	0	0	0	0	56	17:00	4	135	15	1	9	2	1	0	0	0	0	0	165	
5:15	1	37	11	0	8	1	0	0	1	0	0	0	0	57	17:15	8	142	16	0	10	2	0	0	0	1	0	0	178	
5:30	1	58	9	0	7	5	0	1	2	0	1	0	0	81	17:30	4	139	14	0	9	3	2	0	0	0	0	1	170	
5:45	2	55	6	1	9	3	1	1	2	1	0	0	0	78	17:45	5	120	19	0	11	2	0	0	1	0	1	0	158	
6:00	1	45	10	0	9	2	1	1	3	0	0	1	1	70	18:00	5	113	18	0	5	2	1	0	0	0	0	0	143	
6:15	1	63	20	2	6	4	1	0	2	0	1	0	0	96	18:15	2	96	9	0	6	0	1	0	1	0	0	0	114	
6:30	0	95	14	1	11	4	0	1	2	0	0	0	0	126	18:30	3	95	10	1	7	1	1	1	0	1	0	0	116	
6:45	4	106	19	2	13	4	1	1	2	0	0	1	1	151	18:45	5	89	15	0	7	1	1	1	1	0	0	1	118	
7:00	8	164	17	0	7	3	1	1	2	0	0	1	2	204	19:00	3	81	14	0	7	2	0	0	2	0	0	0	107	
7:15	4	147	25	2	12	2	1	1	1	1	0	1	1	196	19:15	3	70	17	0	5	1	0	0	0	0	0	0	94	
7:30	7	149	17	1	5	5	0	1	0	0	1	1	0	185	19:30	1	73	9	0	4	1	0	0	1	0	0	0	87	
7:45	8	141	16	1	9	4	1	1	1	0	0	0	1	180	19:45	2	63	6	0	2	0	0	0	0	0	0	0	73	
8:00	4	124	14	1	7	3	1	0	2	0	1	1	1	156	20:00	1	59	7	0	2	0	1	0	1	0	0	0	69	
8:15	4	127	16	1	9	4	0	0	1	0	0	0	0	159	20:15	1	66	11	0	2	1	0	0	0	0	0	0	80	
8:30	4	117	17	1	8	2	0	0	2	0	0	1	2	152	20:30	1	34	6	0	3	0	0	0	1	1	0	0	44	
8:45	1	101	18	0	7	3	1	1	1	0	1	0	1	133	20:45	1	41	6	0	2	1	0	0	1	0	0	1	51	
9:00	3	79	18	0	10	4	0	1	0	0	0	0	0	115	21:00	1	47	8	1	3	0	0	0	1	0	0	0	60	
9:15	1	85	15	0	6	3	0	0	1	0	0	0	0	110	21:15	1	40	7	0	1	1	0	0	1	0	0	0	49	
9:30	2	88	19	2	10	2	0	1	2	1	0	0	1	125	21:30	1	34	6	0	1	1	0	0	0	0	0	0	43	
9:45	7	86	15	1	6	3	1	0	1	0	0	1	0	119	21:45	0	36	8	0	0	1	0	0	1	0	0	0	45	
10:00	5	73	14	1	7	3	0	0	2	0	1	1	1	104	22:00	0	32	7	0	0	0	0	0	1	0	0	0	39	
10:15	5	103	10	2	7	2	1	1	1	0	0	0	0	130	22:15	0	30	2	0	0	0	0	0	0	0	0	0	32	
10:30	5	90	18	0	10	2	0	1	2	0	0	0	0	125	22:30	0	26	0	0	0	0	0	0	0	0	0	0	26	
10:45	3	90	14	1	10	2	2	1	2	0	1	0	0	122	22:45	0	13	1	0	0	0	0	0	1	0	0	0	14	
11:00	5	91	13	1	8	2	0	0	1	1	1	1	1	123	23:00	0	17	4	0	0	0	0	0	1	0	0	0	22	
11:15	2	101	19	1	7	3	1	1	4	1	0	0	0	135	23:15	0	19	2	0	1	0	0	0	0	0	0	0	22	
11:30	2	101	18	1	6	3	1	1	0	0	1	0	0	132	23:30	0	15	6	0	1	0	0	0	0	0	0	0	21	
11:45	5	118	13	1	6	3	0	1	3	0	0	1	1	149	23:45	0	21	4	0	0	0	0	0	0	0	0	0	25	
TOTAL	89	2,964	490	19	240	77	11	14	42	3	7	6	10	3,967	TOTAL	221	4,316	557	8	247	63	12	5	27	3	5	10	7	5,480

AM PEAK HOUR
AM PEAK VOLUME 7:00 AM 764

PM PEAK HOUR
PM PEAK VOLUME 3:45 PM 724

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	310	7,280	1,046	27	487	140	23	18	69	5	12	16	17	9,447
% OF TOTAL	3.3%	77.1%	11.1%	0.3%	5.2%	1.5%	0.2%	0.2%	0.7%	0.1%	0.1%	0.2%	0.2%	100.0%

Class	1	2	3	4	5	6	7	8	9	10	11	12	13
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TOTAL: ALL	384	11,930	2,530	80	1,580	260	56	53	134	12	27	32	39	17,115
% OF TOTAL	4.1%	126.3%	26.8%	0.8%	16.7%	2.7%	0.6%	0.6%	1.4%	0.1%	0.3%	0.3%	0.4%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

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

DATE: Tuesday, January 22, 2019
JOB #: SC2048

LOCATION#
CLASS9 Ethanac between I-215 SB Ramps and I-215 NB Ramps

AM TIME	WESTBOUND													TOTAL	PM Time	WESTBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	14	2	0	1	0	0	0	0	0	0	0	0	17	12:00	4	63	30	0	19	1	1	1	1	0	0	0	1	119
0:15	0	10	1	0	1	0	0	0	0	1	0	0	0	13	12:15	3	76	19	2	11	1	1	1	1	0	0	1	1	115
0:30	0	10	2	0	3	0	0	1	1	0	0	0	0	15	12:30	7	50	27	0	25	4	1	0	2	0	0	1	0	114
0:45	0	10	3	0	2	0	0	0	0	0	0	0	0	15	12:45	4	51	23	2	13	4	1	1	2	0	0	0	0	99
1:00	0	5	1	0	1	0	0	0	0	0	0	0	0	6	13:00	1	73	21	1	19	0	2	0	1	1	0	1	0	117
1:15	0	9	2	0	2	0	0	0	0	0	0	0	0	13	13:15	2	59	18	1	17	2	0	0	1	0	1	0	1	99
1:30	0	5	2	0	1	0	0	0	0	1	0	0	0	8	13:30	1	58	20	1	16	2	0	2	1	1	1	0	1	102
1:45	0	5	3	0	1	0	0	0	0	0	0	0	0	8	13:45	1	58	15	2	12	4	2	1	1	1	0	0	1	95
2:00	0	7	1	0	2	1	0	1	1	0	0	0	0	11	14:00	3	52	23	0	18	1	1	1	1	1	1	1	1	102
2:15	0	7	1	0	0	0	0	1	1	0	0	0	0	9	14:15	3	70	17	1	16	2	0	1	1	1	2	0	1	111
2:30	0	4	2	1	1	1	0	0	0	0	0	0	0	8	14:30	2	98	19	1	16	4	1	0	2	0	1	1	1	142
2:45	0	9	1	0	1	0	0	0	0	0	0	0	0	10	14:45	1	89	27	1	17	3	1	0	1	1	0	1	2	141
3:00	0	8	4	0	1	0	0	0	0	0	0	0	0	13	15:00	2	95	21	2	15	2	3	2	2	0	1	1	1	145
3:15	0	11	4	0	2	0	0	0	0	1	0	0	0	18	15:15	1	119	23	2	16	1	1	1	0	0	0	0	1	163
3:30	0	11	4	0	0	0	0	0	0	0	0	0	0	14	15:30	1	106	30	1	15	3	1	2	1	0	0	0	0	158
3:45	1	22	6	1	3	0	0	0	1	0	1	0	0	35	15:45	1	120	31	1	20	2	1	0	3	1	0	1	1	179
4:00	0	14	4	0	3	1	0	0	1	0	0	0	0	22	16:00	2	90	27	1	12	2	1	0	1	0	0	1	1	136
4:15	0	17	6	0	5	1	0	0	1	0	1	0	0	30	16:15	0	92	25	0	18	3	1	0	1	0	0	0	1	140
4:30	0	25	2	1	7	0	0	0	1	0	0	0	0	35	16:30	2	87	23	0	16	2	1	1	1	0	0	1	1	133
4:45	0	25	11	0	10	1	1	0	0	1	0	0	0	47	16:45	1	98	21	1	18	3	1	1	2	0	0	1	0	144
5:00	1	20	8	0	5	0	0	0	2	0	1	0	1	36	17:00	1	94	24	1	17	2	0	1	0	0	0	1	0	139
5:15	0	26	11	1	10	1	0	1	4	0	1	0	1	54	17:15	0	107	28	0	22	3	1	1	0	1	1	0	1	163
5:30	0	40	17	0	12	1	0	0	2	0	0	0	0	71	17:30	1	86	27	1	18	4	1	0	0	0	0	1	0	137
5:45	0	35	13	1	16	2	0	0	2	0	0	0	1	68	17:45	1	78	28	1	16	2	1	0	0	0	1	1	0	127
6:00	0	40	13	4	22	1	0	1	1	0	1	0	0	80	18:00	0	71	31	1	17	2	0	1	1	0	0	0	0	121
6:15	0	37	12	1	24	1	0	2	3	0	0	0	1	79	18:15	0	53	27	2	14	2	0	0	1	0	0	0	1	98
6:30	1	50	17	1	16	5	0	1	1	0	1	0	0	92	18:30	1	54	20	0	13	1	0	1	1	0	0	0	0	89
6:45	1	65	15	2	24	3	1	1	1	0	1	0	1	111	18:45	1	65	18	0	8	1	0	0	2	0	0	0	0	93
7:00	0	78	24	1	28	2	1	1	2	0	0	2	0	136	19:00	0	54	17	0	10	0	0	0	1	1	0	0	0	82
7:15	1	107	30	1	20	5	1	2	1	0	0	0	1	166	19:15	1	48	13	1	6	0	0	0	0	0	0	0	0	68
7:30	2	112	28	0	16	3	1	2	0	0	1	0	1	163	19:30	1	37	9	2	8	1	0	1	0	0	0	1	0	57
7:45	1	150	25	1	18	4	1	1	2	0	0	1	0	201	19:45	1	26	20	0	6	1	0	0	1	0	0	0	0	53
8:00	1	122	25	1	14	2	1	2	1	1	1	1	0	170	20:00	1	39	22	0	5	0	1	0	0	0	0	0	0	67
8:15	2	96	26	1	22	2	1	2	1	0	0	1	1	152	20:15	1	25	13	1	8	0	1	0	1	0	0	0	0	48
8:30	1	88	22	1	20	2	0	0	1	0	1	0	0	134	20:30	0	20	10	2	8	1	0	0	0	0	0	1	0	41
8:45	2	68	25	2	15	3	2	1	1	0	0	2	1	119	20:45	1	22	9	0	7	0	1	0	1	0	0	1	0	40
9:00	0	34	22	1	24	1	0	1	1	0	0	0	0	82	21:00	0	14	15	1	3	0	0	0	1	0	0	0	0	33
9:15	1	56	18	1	24	2	1	1	1	0	1	1	0	104	21:15	0	24	10	0	7	0	0	0	1	0	0	0	0	40
9:30	1	43	26	1	22	2	1	1	1	0	1	0	0	96	21:30	0	19	9	0	3	0	0	0	0	0	0	0	0	30
9:45	3	49	31	1	15	2	0	1	1	0	0	1	0	102	21:45	0	17	8	0	3	0	0	0	0	0	0	0	0	28
10:00	4	55	20	1	16	2	0	0	3	0	0	0	1	100	22:00	0	24	6	0	1	0	0	0	1	0	0	0	0	31
10:15	1	41	24	1	14	1	1	0	1	1	0	0	1	84	22:15	0	19	12	0	2	0	0	0	1	0	0	0	0	33
10:30	2	41	19	1	27	4	1	1	1	0	0	0	0	96	22:30	0	10	5	0	3	0	0	0	1	0	0	0	0	18
10:45	4	60	20	2	18	3	2	1	2	1	0	0	1	110	22:45	0	12	8	0	5	0	0	0	1	0	0	0	0	26
11:00	1	54	17	1	18	4	1	1	1	0	0	0	1	96	23:00	0	11	4	0	1	0	0	0	0	0	0	0	0	16
11:15	3	71	25	0	27	4	1	0	0	0	0	0	1	129	23:15	0	9	6	0	1	0	0	0	0	0	0	0	0	15
11:30	1	71	23	1	17	3	0	1	1	0	0	0	0	117	23:30	0	10	8	0	0	0	0	0	0	0	0	0	0	18
11:45	3	71	17	1	19	2	0	1	1	0	1	1	1	114	23:45	0	12	5	0	2	0	0	1	1	0	0	0	0	20
TOTAL	32	1,995	624	28	561	62	12	21	38	2	10	7	11	3,399	TOTAL	43	2,655	860	26	533	58	22	15	28	5	6	10	12	4,269

AM PEAK HOUR 7:15 AM
AM PEAK VOLUME 700

PM PEAK HOUR 3:00 PM
PM PEAK VOLUME 644

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	75	4,650	1,484	54	1,094	120	34	35	65	7	15	16	22	7,668
% OF TOTAL	1.0%	60.6%	19.4%	0.7%	14.3%	1.6%	0.4%	0.5%	0.8%	0.1%	0.2%	0.2%	0.3%	100.0%

Class **1** **2** **3** **4** **5** **6** **7** **8** **9** **10** **11** **12** **13**

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

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

DATE: Tuesday, January 22, 2019
JOB #: SC2048

LOCATION#
CLASS10 Ethanac between I-215 NB Ramps and Encanto

AM TIME	EASTBOUND													TOTAL	PM Time	EASTBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	5	2	0	0	0	0	0	0	0	0	0	0	7	12:00	5	75	11	1	7	1	0	0	0	0	0	1	0	101
0:15	0	9	1	0	0	0	0	0	0	0	0	0	0	10	12:15	9	76	14	0	9	2	0	0	0	0	0	0	0	110
0:30	0	3	2	0	0	0	0	0	0	0	0	0	0	5	12:30	5	66	14	0	4	0	0	0	2	0	0	1	0	92
0:45	0	5	0	0	0	0	1	0	0	0	0	0	0	6	12:45	15	80	11	0	5	1	0	0	2	0	0	1	0	115
1:00	0	10	1	0	1	0	0	0	0	0	0	0	0	12	13:00	11	92	12	1	6	0	0	0	0	0	0	0	122	
1:15	0	11	1	0	0	0	0	0	0	0	0	0	0	12	13:15	7	83	10	0	4	1	0	0	0	0	0	0	105	
1:30	0	8	0	0	0	0	0	0	0	0	0	0	0	8	13:30	18	116	4	0	9	0	0	0	0	0	0	0	147	
1:45	0	3	2	0	0	0	0	0	0	0	0	0	0	5	13:45	22	97	10	0	2	0	1	0	1	1	0	0	134	
2:00	0	5	1	0	0	0	0	0	0	0	0	0	0	6	14:00	11	86	9	0	1	2	0	0	0	0	1	1	111	
2:15	0	2	1	0	0	0	0	0	0	0	0	0	0	3	14:15	25	80	19	0	4	2	0	0	1	0	0	0	131	
2:30	0	10	0	0	0	0	0	0	0	0	0	0	0	10	14:30	29	109	15	1	4	2	0	0	1	0	1	2	164	
2:45	0	9	3	0	0	0	0	0	0	0	0	0	0	12	14:45	27	98	11	0	6	2	0	0	2	1	0	0	147	
3:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4	15:00	31	117	8	0	10	0	1	0	1	0	0	1	169	
3:15	0	10	0	0	0	0	0	0	0	0	0	0	0	10	15:15	12	99	12	1	7	0	0	0	0	0	0	0	131	
3:30	1	24	1	0	0	0	0	0	0	0	0	0	0	26	15:30	21	92	14	0	10	0	0	0	0	0	0	0	137	
3:45	0	15	2	0	2	0	0	0	0	0	0	0	0	19	15:45	15	142	12	0	1	0	0	0	1	0	0	2	173	
4:00	0	9	1	0	1	1	0	1	0	0	0	0	0	13	16:00	24	96	20	0	7	0	0	0	0	0	0	1	148	
4:15	0	10	1	0	0	0	0	0	0	0	0	0	0	11	16:15	26	94	12	0	6	3	0	0	1	0	0	0	142	
4:30	0	14	2	0	2	0	0	0	0	0	0	0	0	18	16:30	17	122	12	0	3	0	0	0	1	0	1	0	156	
4:45	0	29	6	0	1	0	0	0	0	0	0	0	0	36	16:45	13	110	10	0	3	0	0	0	0	0	0	0	136	
5:00	0	26	3	0	4	0	0	0	0	0	0	0	0	33	17:00	6	100	6	0	9	1	0	0	0	0	0	0	122	
5:15	0	17	1	0	4	0	0	0	0	0	0	0	0	22	17:15	15	109	9	0	4	0	0	0	0	0	0	0	137	
5:30	0	29	5	0	4	0	0	0	1	0	0	0	0	39	17:30	8	102	8	0	2	1	0	0	0	0	1	0	122	
5:45	2	36	3	2	6	0	0	0	0	0	0	0	0	49	17:45	10	98	17	0	8	0	0	0	1	0	0	0	134	
6:00	1	25	6	0	4	1	0	0	1	0	0	0	0	38	18:00	9	93	19	0	3	1	0	0	0	0	0	0	125	
6:15	1	36	18	0	6	1	0	0	1	0	0	0	0	63	18:15	4	75	8	0	5	0	0	0	0	0	0	1	93	
6:30	0	52	10	0	8	0	0	0	1	0	0	0	0	71	18:30	5	79	9	0	3	1	0	0	0	0	0	0	97	
6:45	7	87	11	3	9	3	0	0	1	0	0	1	0	122	18:45	8	66	10	0	3	0	0	0	0	0	0	0	87	
7:00	16	139	12	0	6	4	0	0	0	0	0	0	0	177	19:00	6	52	7	0	6	1	0	0	0	0	0	0	72	
7:15	6	121	23	0	12	0	0	0	0	1	0	0	0	163	19:15	5	51	9	0	1	0	0	0	0	0	0	0	66	
7:30	12	116	18	1	3	1	0	1	0	0	1	0	0	153	19:30	2	51	3	0	5	0	0	0	0	0	0	0	61	
7:45	16	124	13	1	7	3	0	1	1	0	0	0	0	166	19:45	2	48	4	0	3	0	0	0	0	0	0	0	57	
8:00	7	101	9	0	2	2	0	0	2	0	0	0	2	125	20:00	2	45	8	0	0	0	0	0	0	0	0	0	55	
8:15	7	85	13	1	8	0	0	0	0	0	0	0	0	114	20:15	2	47	3	0	2	0	0	0	0	0	0	0	54	
8:30	8	86	12	0	6	1	0	0	0	0	0	1	0	114	20:30	1	27	4	0	2	0	0	0	0	0	0	0	34	
8:45	1	63	11	0	5	1	0	1	0	0	0	0	0	82	20:45	2	31	6	0	1	0	0	0	1	0	0	0	41	
9:00	5	50	11	0	8	2	0	1	0	0	0	0	0	77	21:00	2	38	7	0	2	0	0	0	0	0	0	0	49	
9:15	1	44	9	0	4	1	0	0	0	0	0	0	0	59	21:15	1	24	6	0	0	0	0	0	0	0	0	0	31	
9:30	3	52	16	1	10	0	0	0	1	0	0	0	1	84	21:30	2	27	4	0	1	0	0	0	0	0	0	0	34	
9:45	13	58	10	0	2	1	0	0	0	0	0	1	0	85	21:45	0	34	6	0	0	0	0	0	0	0	0	0	40	
10:00	8	43	7	1	2	0	0	0	1	0	0	0	0	62	22:00	0	24	4	0	0	0	0	0	0	0	0	0	28	
10:15	10	72	7	1	6	2	0	0	0	0	0	0	0	98	22:15	0	31	2	0	0	0	0	0	0	0	0	0	33	
10:30	8	55	9	0	6	0	0	0	1	0	0	0	0	79	22:30	0	25	2	0	0	0	0	0	0	0	0	0	27	
10:45	5	61	12	0	8	0	0	1	2	0	0	0	0	89	22:45	0	8	1	0	0	0	0	0	0	0	0	0	9	
11:00	10	62	11	0	5	0	0	0	0	1	0	1	1	91	23:00	0	12	0	0	0	0	0	0	0	0	0	0	12	
11:15	3	78	11	0	5	3	0	0	2	0	0	0	0	102	23:15	0	14	2	0	1	0	0	0	0	0	0	0	17	
11:30	4	71	11	1	4	0	0	1	0	0	0	0	0	92	23:30	0	8	3	0	0	0	0	0	0	0	0	0	11	
11:45	9	94	15	0	2	1	0	0	0	0	0	0	0	121	23:45	0	13	2	0	0	0	0	0	0	0	0	0	15	
TOTAL	164	2,078	324	12	163	28	1	7	15	2	1	4	4	2,803	TOTAL	435	3,262	409	4	169	21	2	0	15	2	3	11	1	4,334

AM PEAK HOUR
AM PEAK VOLUME
7:00 AM
659

PM PEAK HOUR
PM PEAK VOLUME
3:45 PM
619

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	599	5,340	733	16	332	49	3	7	30	4	4	15	5	7,137
% OF TOTAL	8.4%	74.8%	10.3%	0.2%	4.7%	0.7%	0.0%	0.1%	0.4%	0.1%	0.1%	0.2%	0.1%	100.0%

Class	1	2	3	4	5	6	7	8	9	10	11	12	13
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TOTAL: ALL	625	9,235	1,462	43	905	127	14	31	88	6	22	19	10	12,587
% OF TOTAL	8.8%	129.4%	20.5%	0.6%	12.7%	1.8%	0.2%	0.4%	1.2%	0.1%	0.3%	0.3%	0.1%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

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

DATE: Tuesday, January 22, 2019
JOB #: SC2048

LOCATION#
CLASS10 Ethanac between I-215 NB Ramps and Encanto

AM TIME	WESTBOUND													TOTAL	PM Time	WESTBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	10	0	0	0	0	0	0	0	0	0	0	0	10	12:00	1	62	14	0	14	1	0	1	0	0	0	0	93	
0:15	0	4	0	0	0	0	0	0	0	0	0	0	0	4	12:15	0	72	10	2	6	0	0	0	1	0	0	0	91	
0:30	0	4	0	0	1	0	0	0	0	0	0	0	0	5	12:30	0	52	10	0	17	3	0	0	2	0	0	0	84	
0:45	0	5	0	0	0	0	0	0	0	0	0	0	0	5	12:45	1	43	8	2	7	3	1	2	2	0	0	0	69	
1:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3	13:00	0	58	10	0	11	0	1	0	0	0	0	0	80	
1:15	0	2	2	0	0	0	0	0	0	0	0	0	0	4	13:15	1	58	13	1	11	1	0	0	0	1	0	0	86	
1:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2	13:30	1	60	11	1	4	3	0	1	1	0	2	0	84	
1:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4	13:45	0	59	7	1	8	3	2	0	1	0	0	0	81	
2:00	0	2	0	0	1	0	0	0	0	0	0	0	0	3	14:00	3	46	6	0	10	0	1	1	0	0	0	0	67	
2:15	0	2	0	0	0	0	0	0	1	0	0	0	0	3	14:15	0	57	4	0	6	0	0	1	1	1	2	0	72	
2:30	0	3	0	0	0	0	0	0	0	0	0	0	0	3	14:30	1	77	8	1	12	3	1	0	1	0	1	0	105	
2:45	0	4	1	0	0	0	0	0	0	0	0	0	0	5	14:45	0	83	17	1	5	1	0	0	1	0	0	0	108	
3:00	0	4	2	0	1	0	0	0	0	0	0	0	0	7	15:00	1	76	14	1	6	2	1	1	2	0	1	0	105	
3:15	0	10	5	0	0	0	0	0	1	0	0	0	0	16	15:15	0	100	13	1	9	1	0	1	0	0	0	1	126	
3:30	0	10	2	0	0	0	0	0	0	0	0	0	0	12	15:30	1	89	14	1	8	0	1	1	0	0	0	0	115	
3:45	1	15	8	1	1	0	0	0	1	0	1	0	0	28	15:45	1	105	16	0	9	1	0	0	4	0	0	1	137	
4:00	0	15	3	0	2	1	0	0	2	0	0	0	0	23	16:00	0	70	21	0	2	1	0	0	0	0	0	0	94	
4:15	0	19	4	0	3	1	0	0	2	0	1	0	0	30	16:15	0	67	22	0	8	2	0	0	1	0	0	0	100	
4:30	0	18	1	1	7	0	0	0	2	0	0	0	0	29	16:30	0	60	16	0	11	1	0	2	1	0	1	0	92	
4:45	0	22	5	0	7	0	1	0	0	0	0	0	0	35	16:45	1	76	9	1	7	2	0	1	1	0	0	0	98	
5:00	0	19	6	0	5	0	0	0	2	0	1	0	0	33	17:00	0	82	17	0	9	2	0	0	0	0	0	0	110	
5:15	0	26	7	0	8	1	0	0	4	0	2	0	0	48	17:15	0	90	14	0	9	1	0	0	0	0	0	0	114	
5:30	0	39	8	0	13	1	0	0	3	0	0	0	0	64	17:30	1	70	15	0	9	2	0	0	0	0	0	0	97	
5:45	0	34	7	1	10	0	0	0	2	0	0	0	0	54	17:45	1	70	15	0	5	0	1	0	0	0	1	0	93	
6:00	0	29	10	3	12	1	0	1	1	0	1	0	0	58	18:00	0	41	10	0	10	1	0	1	0	0	0	0	63	
6:15	0	28	6	0	15	1	0	0	1	0	0	0	1	52	18:15	0	42	12	0	3	1	0	0	1	0	0	0	59	
6:30	0	42	9	0	6	3	0	0	1	0	1	0	0	62	18:30	0	36	9	0	8	0	0	0	0	0	0	0	53	
6:45	0	55	7	1	14	1	0	0	0	0	2	0	0	80	18:45	0	56	6	0	6	0	0	0	0	0	0	0	68	
7:00	0	51	8	0	12	2	0	0	0	0	0	0	0	73	19:00	0	47	5	0	5	0	0	0	0	0	0	0	57	
7:15	1	82	14	1	9	2	0	1	1	0	0	0	0	111	19:15	0	33	6	1	1	0	0	0	0	0	0	0	41	
7:30	2	53	8	0	9	0	0	0	0	0	1	0	0	73	19:30	1	32	4	0	5	1	0	0	0	0	0	0	43	
7:45	0	107	9	0	11	2	0	0	1	0	0	1	0	131	19:45	0	24	9	0	2	0	0	0	0	0	0	0	35	
8:00	0	100	11	0	8	0	0	2	1	0	0	0	0	122	20:00	0	31	3	0	4	0	0	0	0	0	0	0	38	
8:15	0	85	20	0	13	3	0	2	0	0	0	0	0	123	20:15	0	25	3	0	5	0	0	0	0	0	0	0	33	
8:30	0	80	10	1	10	0	0	0	0	0	0	0	0	101	20:30	0	16	6	0	4	0	0	0	0	0	0	0	26	
8:45	1	55	13	0	10	2	0	1	1	0	0	2	2	87	20:45	0	22	5	0	0	0	0	0	0	0	0	0	27	
9:00	0	44	12	0	12	0	0	0	1	0	0	0	0	69	21:00	0	18	6	0	0	0	0	0	0	0	0	0	24	
9:15	0	52	12	1	11	0	0	0	0	0	0	0	0	76	21:15	0	19	2	0	3	0	0	0	0	0	0	0	24	
9:30	0	43	10	0	10	2	0	1	1	0	0	0	0	67	21:30	0	17	1	0	1	0	0	0	0	0	0	0	19	
9:45	1	52	18	1	7	1	0	1	0	0	0	0	0	81	21:45	0	19	3	0	0	0	0	0	0	0	0	0	22	
10:00	0	52	9	0	10	2	0	0	2	0	0	0	0	75	22:00	0	13	3	0	0	0	0	0	0	0	0	0	16	
10:15	1	38	10	1	6	1	0	0	1	1	0	0	0	59	22:15	0	10	2	0	1	0	0	0	0	0	0	0	13	
10:30	2	44	7	0	15	4	1	0	1	0	0	0	0	74	22:30	0	7	1	0	1	0	0	0	0	0	0	0	9	
10:45	1	60	9	0	5	3	0	0	2	0	0	0	0	80	22:45	0	11	1	0	3	0	0	0	0	0	0	0	15	
11:00	1	38	13	0	9	3	0	0	1	0	0	0	0	65	23:00	0	4	1	0	1	0	0	0	0	0	0	0	6	
11:15	0	73	11	0	13	1	0	0	0	0	0	0	0	98	23:15	0	6	4	0	0	0	0	0	0	0	0	0	10	
11:30	0	68	13	0	8	3	0	1	1	0	0	0	0	94	23:30	0	6	2	0	0	0	0	0	0	0	0	0	8	
11:45	0	61	11	1	13	1	0	1	1	0	0	0	0	89	23:45	0	10	0	0	0	0	0	0	0	0	0	0	10	
TOTAL	11	1,668	321	13	307	42	2	11	38	1	10	3	3	2,430	TOTAL	15	2,227	408	14	266	36	9	13	20	1	8	1	2	3,020

AM PEAK HOUR 7:45 AM
AM PEAK VOLUME 477

PM PEAK HOUR 3:00 PM
PM PEAK VOLUME 483

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	26	3,895	729	27	573	78	11	24	58	2	18	4	5	5,450
% OF TOTAL	0.5%	71.5%	13.4%	0.5%	10.5%	1.4%	0.2%	0.4%	1.1%	0.0%	0.3%	0.1%	0.1%	100.0%

Class **1** **2** **3** **4** **5** **6** **7** **8** **9** **10** **11** **12** **13**

Counts Unlimited, Inc.

City of Menifee
 Ethanac Road
 B/ Encanto Drive - Sherman Road
 24 Hour Directional Volume Count

PO Box 1178
 Corona, CA 92878
 Phone: (951) 268-6268
 email: counts@countsunlimited.com

MEN001
 Site Code: 051-18251

Eastbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/30/18	0	41	12	1	1	0	0	0	0	0	0	0	0	55
01:00	0	14	2	1	0	0	0	0	0	0	0	0	0	17
02:00	0	12	4	0	2	0	0	0	0	0	0	0	0	18
03:00	0	17	9	0	3	0	0	1	0	0	0	0	0	30
04:00	0	59	30	1	8	0	0	0	1	0	0	0	0	99
05:00	0	55	30	1	16	1	0	1	4	0	0	0	0	108
06:00	0	123	58	3	29	3	0	2	0	0	1	0	0	219
07:00	2	259	111	0	35	2	0	10	3	0	0	0	0	422
08:00	0	151	78	1	40	3	0	5	0	0	2	0	0	280
09:00	1	113	47	2	43	2	3	3	1	0	0	0	0	215
10:00	0	140	57	2	32	1	2	8	3	0	1	0	0	246
11:00	0	165	96	6	30	1	1	6	1	0	0	0	0	306
12 PM	3	222	101	2	43	3	0	2	1	0	0	0	0	377
13:00	1	214	98	3	43	3	0	8	5	0	0	0	0	375
14:00	1	214	93	3	42	5	1	7	6	0	4	1	0	377
15:00	2	303	129	5	70	2	1	3	5	0	2	0	0	522
16:00	3	310	142	0	50	6	0	6	4	0	5	0	0	526
17:00	4	279	112	1	57	4	2	3	1	0	3	0	0	466
18:00	4	217	76	0	42	0	0	1	2	0	0	0	0	342
19:00	1	180	56	0	25	1	0	2	0	0	0	0	0	265
20:00	2	179	65	1	13	1	0	0	1	0	0	0	0	262
21:00	1	127	38	1	11	0	0	1	0	0	0	0	0	179
22:00	0	93	12	0	6	0	0	1	0	0	0	0	0	112
23:00	1	48	13	0	3	0	0	0	0	0	1	0	0	66
Total	26	3535	1469	34	644	38	10	70	38	0	19	1	0	5884
Percent	0.4%	60.1%	25.0%	0.6%	10.9%	0.6%	0.2%	1.2%	0.6%	0.0%	0.3%	0.0%	0.0%	
AM Peak	07:00	07:00	07:00	11:00	09:00	06:00	09:00	07:00	05:00		08:00			07:00
Vol.	2	259	111	6	43	3	3	10	4		2			422
PM Peak	17:00	16:00	16:00	15:00	15:00	16:00	17:00	13:00	14:00		16:00	14:00		16:00
Vol.	4	310	142	5	70	6	2	8	6		5	1		526
Grand Total	26	3535	1469	34	644	38	10	70	38	0	19	1	0	5884
Percent	0.4%	60.1%	25.0%	0.6%	10.9%	0.6%	0.2%	1.2%	0.6%	0.0%	0.3%	0.0%	0.0%	

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 Ethanac Road
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 24 Hour Directional Volume Count

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 Phone: (951) 268-6268
 email: counts@countsunlimited.com

MEN001
 Site Code: 051-18251

Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/30/18	2	10	5	0	1	1	0	0	0	0	0	0	0	19
01:00	0	11	4	0	2	0	0	0	0	0	0	0	0	17
02:00	0	10	0	0	0	0	0	0	0	0	1	0	0	11
03:00	0	21	4	0	2	1	0	0	1	0	1	0	0	30
04:00	0	59	18	0	14	4	0	1	5	0	2	0	0	103
05:00	0	97	43	0	25	5	0	1	6	0	2	0	0	179
06:00	1	149	57	1	20	4	0	3	4	0	3	0	0	242
07:00	3	337	91	1	22	5	0	1	0	0	1	0	0	461
08:00	2	193	64	0	16	7	0	5	3	0	0	0	0	290
09:00	0	141	55	0	21	8	0	4	2	0	1	0	0	232
10:00	0	151	49	0	8	6	0	2	2	0	0	0	0	218
11:00	2	137	46	2	14	3	0	4	3	0	0	0	0	211
12 PM	0	277	70	0	15	4	0	3	0	0	0	0	0	369
13:00	2	204	51	1	14	2	0	4	2	0	0	0	0	280
14:00	1	175	56	1	11	5	0	4	1	0	0	0	0	254
15:00	3	269	59	3	18	7	0	3	4	0	0	1	0	367
16:00	1	222	62	1	19	3	0	4	4	0	0	0	0	316
17:00	2	226	50	0	9	4	0	0	0	0	0	0	0	291
18:00	0	141	40	1	7	1	0	0	1	0	1	0	0	192
19:00	2	132	35	0	5	1	0	0	0	0	0	0	0	175
20:00	0	107	31	1	3	0	0	1	0	0	0	0	0	143
21:00	0	81	24	0	3	1	0	0	0	0	1	0	0	110
22:00	1	42	7	0	0	0	0	1	0	0	0	0	0	51
23:00	0	26	4	0	0	0	0	0	0	0	0	0	0	30
Total	22	3218	925	12	249	72	0	41	38	0	13	1	0	4591
Percent	0.5%	70.1%	20.1%	0.3%	5.4%	1.6%	0.0%	0.9%	0.8%	0.0%	0.3%	0.0%	0.0%	
AM Peak	07:00	07:00	07:00	11:00	05:00	09:00		08:00	05:00		06:00			07:00
Vol.	3	337	91	2	25	8		5	6		3			461
PM Peak	15:00	12:00	12:00	15:00	16:00	15:00		13:00	15:00		18:00	15:00		12:00
Vol.	3	277	70	3	19	7		4	4		1	1		369
Grand Total	22	3218	925	12	249	72	0	41	38	0	13	1	0	4591
Percent	0.5%	70.1%	20.1%	0.3%	5.4%	1.6%	0.0%	0.9%	0.8%	0.0%	0.3%	0.0%	0.0%	

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MEN001
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Eastbound, Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/30/18	2	51	17	1	2	1	0	0	0	0	0	0	0	74
01:00	0	25	6	1	2	0	0	0	0	0	0	0	0	34
02:00	0	22	4	0	2	0	0	0	0	0	1	0	0	29
03:00	0	38	13	0	5	1	0	1	1	0	1	0	0	60
04:00	0	118	48	1	22	4	0	1	6	0	2	0	0	202
05:00	0	152	73	1	41	6	0	2	10	0	2	0	0	287
06:00	1	272	115	4	49	7	0	5	4	0	4	0	0	461
07:00	5	596	202	1	57	7	0	11	3	0	1	0	0	883
08:00	2	344	142	1	56	10	0	10	3	0	2	0	0	570
09:00	1	254	102	2	64	10	3	7	3	0	1	0	0	447
10:00	0	291	106	2	40	7	2	10	5	0	1	0	0	464
11:00	2	302	142	8	44	4	1	10	4	0	0	0	0	517
12 PM	3	499	171	2	58	7	0	5	1	0	0	0	0	746
13:00	3	418	149	4	57	5	0	12	7	0	0	0	0	655
14:00	2	389	149	4	53	10	1	11	7	0	4	1	0	631
15:00	5	572	188	8	88	9	1	6	9	0	2	1	0	889
16:00	4	532	204	1	69	9	0	10	8	0	5	0	0	842
17:00	6	505	162	1	66	8	2	3	1	0	3	0	0	757
18:00	4	358	116	1	49	1	0	1	3	0	1	0	0	534
19:00	3	312	91	0	30	2	0	2	0	0	0	0	0	440
20:00	2	286	96	2	16	1	0	1	1	0	0	0	0	405
21:00	1	208	62	1	14	1	0	1	0	0	1	0	0	289
22:00	1	135	19	0	6	0	0	2	0	0	0	0	0	163
23:00	1	74	17	0	3	0	0	0	0	0	1	0	0	96
Total	48	6753	2394	46	893	110	10	111	76	0	32	2	0	10475
Percent	0.5%	64.5%	22.9%	0.4%	8.5%	1.1%	0.1%	1.1%	0.7%	0.0%	0.3%	0.0%	0.0%	
AM Peak	07:00	07:00	07:00	11:00	09:00	08:00	09:00	07:00	05:00		06:00			07:00
Vol.	5	596	202	8	64	10	3	11	10		4			883
PM Peak	17:00	15:00	16:00	15:00	15:00	14:00	17:00	13:00	15:00		16:00	14:00		15:00
Vol.	6	572	204	8	88	10	2	12	9		5	1		889
Grand Total	48	6753	2394	46	893	110	10	111	76	0	32	2	0	10475
Percent	0.5%	64.5%	22.9%	0.4%	8.5%	1.1%	0.1%	1.1%	0.7%	0.0%	0.3%	0.0%	0.0%	

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

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

DATE: Tuesday, January 22, 2019
JOB #: SC2048

LOCATION#
CLASS13 Ethanac between Sherman and Dawson

AM TIME	EASTBOUND													TOTAL	PM Time	EASTBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4	12:00	0	37	9	0	3	0	1	0	1	0	0	0	51	
0:15	0	3	1	0	0	0	0	0	0	0	0	0	0	4	12:15	0	41	6	0	3	0	0	0	1	0	0	0	52	
0:30	0	3	1	0	0	0	0	0	0	0	0	0	0	4	12:30	0	39	11	0	2	0	0	0	2	0	0	0	54	
0:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4	12:45	1	43	10	0	4	2	0	0	2	0	0	0	60	
1:00	0	4	1	0	1	0	0	0	0	0	0	0	0	6	13:00	1	51	10	0	5	0	0	0	0	0	0	0	66	
1:15	0	8	0	0	0	0	0	0	0	0	0	0	0	8	13:15	0	49	10	0	4	0	0	0	1	0	0	0	63	
1:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2	13:30	0	52	9	0	6	1	0	0	1	0	0	0	69	
1:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1	13:45	0	66	12	0	4	1	0	0	0	0	0	0	83	
2:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2	14:00	0	47	13	0	3	0	0	0	3	0	1	0	0	65
2:15	0	1	1	0	0	0	0	0	0	0	0	0	0	2	14:15	0	60	15	0	2	0	0	1	1	0	0	0	78	
2:30	0	7	1	0	0	0	0	0	0	0	0	0	0	7	14:30	1	69	11	1	3	0	0	0	1	0	1	0	0	87
2:45	0	4	2	0	0	0	0	0	0	0	0	0	0	6	14:45	0	66	8	0	3	1	0	1	1	0	0	0	79	
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15:00	0	67	12	0	10	0	0	0	3	0	0	0	92	
3:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3	15:15	0	54	13	0	4	1	0	0	1	0	1	0	0	74
3:30	0	8	2	0	0	0	0	0	0	0	0	0	0	10	15:30	0	62	18	0	6	0	0	0	1	0	0	0	0	87
3:45	0	7	1	0	0	0	0	0	0	0	0	0	0	9	15:45	0	61	17	0	2	0	0	0	2	0	0	0	0	81
4:00	0	5	0	0	0	0	0	0	0	0	0	0	0	6	16:00	0	59	17	0	3	0	1	0	1	0	0	0	0	81
4:15	0	4	1	0	0	0	0	0	0	0	0	0	0	5	16:15	0	65	11	0	3	0	1	0	1	0	0	0	0	81
4:30	0	12	2	0	1	0	0	0	0	0	0	0	0	15	16:30	0	75	16	0	3	0	0	0	1	0	2	0	0	97
4:45	0	21	4	0	1	0	0	0	0	0	0	0	0	26	16:45	0	69	11	0	5	0	0	0	0	0	0	0	0	85
5:00	0	15	4	0	2	0	0	0	0	0	0	0	0	21	17:00	0	56	11	0	7	0	0	0	0	0	0	0	0	75
5:15	0	11	2	0	3	0	0	0	0	0	0	0	0	16	17:15	0	66	7	0	3	0	0	0	0	0	0	0	0	76
5:30	0	16	5	0	3	0	0	0	0	0	0	0	0	23	17:30	0	66	9	0	2	0	0	0	0	0	0	0	0	76
5:45	0	14	3	0	3	1	0	0	0	0	0	0	0	20	17:45	0	57	13	0	5	0	0	0	0	0	0	0	0	76
6:00	0	17	4	0	1	0	1	0	0	0	0	0	0	22	18:00	0	65	18	0	1	0	0	0	0	0	0	0	0	84
6:15	0	26	9	0	3	1	0	1	0	0	0	0	0	39	18:15	0	52	7	0	2	0	0	0	0	0	0	0	0	60
6:30	0	34	5	0	6	0	0	0	0	0	0	0	0	46	18:30	1	49	12	0	1	0	0	0	0	0	0	0	0	63
6:45	0	48	13	1	4	0	0	1	1	0	0	0	0	68	18:45	0	50	8	0	2	0	0	0	0	0	0	0	0	59
7:00	0	104	17	0	3	0	0	0	0	0	0	0	0	124	19:00	0	28	6	0	4	1	0	0	0	0	0	0	0	40
7:15	0	108	19	0	4	0	0	0	0	0	0	0	0	131	19:15	0	32	7	0	1	0	0	0	0	0	0	0	0	39
7:30	0	67	19	1	7	0	0	1	1	0	0	0	0	96	19:30	0	31	5	0	4	0	0	0	0	0	0	0	0	39
7:45	2	57	10	0	3	1	0	0	1	0	0	0	0	73	19:45	1	31	6	0	2	0	0	0	0	0	0	0	0	40
8:00	0	29	7	0	2	0	0	0	2	0	0	0	0	41	20:00	0	25	6	0	1	0	0	0	0	0	0	0	0	35
8:15	0	36	11	1	2	0	0	0	0	0	0	0	0	51	20:15	0	31	3	0	1	0	0	0	0	0	0	0	0	32
8:30	0	42	9	0	2	0	1	0	0	0	0	0	0	54	20:30	0	9	6	0	1	0	0	0	1	0	0	0	0	18
8:45	0	30	5	1	5	0	0	0	0	0	0	0	0	41	20:45	0	20	2	0	0	0	0	0	0	0	0	0	0	23
9:00	0	22	11	0	1	0	0	0	0	0	0	0	0	34	21:00	0	13	4	0	1	0	0	0	0	0	0	0	0	18
9:15	0	29	6	0	5	0	0	0	1	0	0	0	0	41	21:15	0	14	4	0	0	0	0	0	0	0	0	0	0	19
9:30	0	32	11	0	4	0	0	0	1	0	0	0	0	47	21:30	0	24	1	0	0	0	0	0	0	0	0	0	0	25
9:45	0	32	14	0	3	1	0	0	1	0	0	0	0	50	21:45	0	17	3	0	0	0	0	0	0	0	0	0	0	19
10:00	1	28	5	0	1	0	0	0	1	0	0	0	0	35	22:00	0	16	0	0	0	0	0	0	0	0	0	0	0	16
10:15	0	30	4	0	4	2	0	0	1	0	0	0	0	41	22:15	0	17	1	0	0	0	0	0	0	0	0	0	0	18
10:30	0	26	7	0	4	1	0	0	0	0	0	0	0	38	22:30	0	17	1	0	0	0	0	0	0	0	0	0	0	17
10:45	0	27	5	0	3	0	1	0	2	0	0	0	0	37	22:45	0	5	1	0	0	0	0	0	0	0	0	0	0	6
11:00	0	39	7	0	2	0	1	0	1	0	0	1	0	51	23:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
11:15	0	30	6	0	5	0	0	1	2	0	0	0	0	44	23:15	0	6	2	0	0	0	0	0	0	0	0	0	0	8
11:30	0	38	10	1	2	0	0	0	0	0	0	0	0	51	23:30	0	5	2	0	0	0	0	0	0	0	0	0	0	7
11:45	0	47	8	0	2	0	0	0	0	0	0	0	0	57	23:45	0	6	1	0	0	0	0	0	0	0	0	0	0	6
TOTAL	4	1,130	250	6	91	8	4	5	16	0	0	2	0	1,514	TOTAL	6	1,941	379	2	112	7	3	2	23	0	5	0	0	2,480

AM PEAK HOUR 7:00 AM
AM PEAK VOLUME 424

PM PEAK HOUR 4:00 PM
PM PEAK VOLUME 344

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	10	3,070	629	8	203	14	7	7	39	0	5	2	0	3,994
% OF TOTAL	0.2%	76.9%	15.8%	0.2%	5.1%	0.4%	0.2%	0.2%	1.0%	0.0%	0.1%	0.0%	0.0%	100.0%

Class	1	2	3	4	5	6	7	8	9	10	11	12	13	
TOTAL: ALL	13	5,389	1,106	23	494	35	8	16	78	0	7	3	0	7,169
% OF TOTAL	0.3%	134.9%	27.7%	0.6%	12.4%	0.9%	0.2%	0.4%	1.9%	0.0%	0.2%	0.1%	0.0%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

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

DATE: Tuesday, January 22, 2019
JOB #: SC2048

LOCATION#
CLASS13 Ethanac between Sherman and Dawson

AM TIME	WESTBOUND													TOTAL	PM Time	WESTBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4	12:00	0	36	5	0	3	0	0	0	0	0	0	45		
0:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2	12:15	0	29	5	1	4	0	0	0	1	0	0	39		
0:30	0	2	0	0	1	0	0	0	0	0	0	0	0	3	12:30	0	30	8	0	7	0	0	0	1	0	0	46		
0:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2	12:45	0	29	5	2	2	0	0	0	1	0	0	39		
1:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2	13:00	0	29	4	0	5	0	0	0	0	0	0	38		
1:15	0	0	2	0	0	0	0	0	0	0	0	0	0	2	13:15	0	33	7	0	2	0	0	0	1	1	0	43		
1:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13:30	0	38	8	0	3	0	0	1	0	0	0	50		
1:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1	13:45	0	28	4	0	2	0	0	0	1	0	0	36		
2:00	0	1	0	0	0	0	0	0	0	0	0	0	0	2	14:00	0	31	5	0	6	1	0	0	0	0	0	43		
2:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14:15	0	45	4	0	5	0	0	0	4	0	0	59		
2:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14:30	0	65	11	0	8	1	0	0	1	0	0	86		
2:45	0	1	1	0	0	0	0	0	0	0	0	0	0	3	14:45	0	45	10	1	6	1	0	0	0	0	0	63		
3:00	0	1	0	0	1	0	0	0	0	0	0	0	0	2	15:00	0	43	13	0	7	0	0	1	2	0	0	66		
3:15	0	3	3	0	0	0	0	0	1	0	0	0	0	6	15:15	1	55	15	0	2	0	0	0	0	0	0	74		
3:30	0	7	1	0	1	0	0	0	0	0	0	0	0	9	15:30	0	73	11	2	7	0	0	0	2	0	0	94		
3:45	0	10	5	0	0	0	0	0	0	0	1	0	0	16	15:45	0	66	15	0	6	0	1	0	0	0	0	87		
4:00	0	10	0	0	2	1	0	0	1	0	0	0	0	14	16:00	0	41	15	0	6	0	0	0	0	0	0	62		
4:15	0	13	2	0	1	0	0	0	2	0	0	0	0	19	16:15	0	44	8	0	5	1	0	0	0	0	0	57		
4:30	0	11	1	1	3	0	0	0	0	0	0	0	0	16	16:30	0	43	6	1	2	0	0	0	3	0	0	54		
4:45	0	16	2	0	4	0	0	0	1	0	0	0	0	23	16:45	0	50	6	0	3	2	0	0	0	0	0	61		
5:00	0	8	5	0	4	0	0	0	1	0	1	0	0	18	17:00	0	45	6	0	5	0	0	1	0	0	0	57		
5:15	0	17	5	0	4	0	0	0	2	0	0	0	0	28	17:15	0	53	11	1	6	0	0	0	0	0	0	70		
5:30	0	16	5	0	11	0	0	0	1	0	0	0	0	32	17:30	0	50	12	0	4	0	0	0	0	0	0	66		
5:45	0	27	6	0	5	0	0	0	0	0	0	0	0	38	17:45	0	42	7	0	5	0	0	0	0	0	0	55		
6:00	0	20	8	1	7	1	0	0	1	0	0	0	0	37	18:00	0	27	7	0	3	0	0	0	0	0	0	37		
6:15	0	16	6	0	6	0	0	0	0	0	0	0	0	29	18:15	0	23	8	0	2	0	0	1	0	0	0	34		
6:30	0	31	8	1	4	0	0	0	1	0	0	0	0	44	18:30	0	20	2	0	0	0	0	0	0	0	0	21		
6:45	0	33	5	0	6	0	0	0	0	0	0	0	0	44	18:45	0	21	2	0	2	0	0	0	0	0	0	25		
7:00	0	46	9	0	5	0	0	0	1	0	0	0	0	62	19:00	0	22	3	0	0	0	0	0	0	0	0	25		
7:15	0	50	12	0	7	3	0	0	1	0	0	0	0	73	19:15	0	21	4	1	0	0	0	0	1	0	0	26		
7:30	0	60	10	0	10	1	0	0	0	0	0	0	0	81	19:30	0	13	3	0	1	0	0	0	0	0	0	16		
7:45	0	84	16	0	6	0	0	0	0	0	0	0	0	107	19:45	0	16	4	0	1	0	0	0	0	0	0	20		
8:00	0	69	12	0	8	0	0	1	0	0	0	0	0	90	20:00	0	13	2	0	1	0	0	0	0	0	0	16		
8:15	0	35	9	0	5	1	0	0	0	0	0	0	0	49	20:15	0	10	3	0	2	0	0	0	0	0	0	14		
8:30	0	35	7	1	5	0	0	0	0	0	0	0	0	48	20:30	0	7	5	0	0	0	0	0	0	0	0	12		
8:45	0	39	9	0	4	1	0	0	0	0	0	1	0	53	20:45	0	11	2	0	2	0	0	0	0	0	0	15		
9:00	0	27	4	0	7	0	0	0	0	0	0	0	0	38	21:00	0	11	2	0	0	0	0	0	0	0	0	14		
9:15	0	27	10	0	5	0	0	0	0	0	0	0	0	41	21:15	0	12	1	0	1	0	0	0	0	0	0	14		
9:30	0	29	7	0	3	0	0	1	0	0	0	0	0	39	21:30	0	5	0	0	0	0	0	0	0	0	0	5		
9:45	0	27	6	1	5	0	0	2	1	0	0	0	0	43	21:45	0	12	2	0	0	0	0	0	0	0	0	14		
10:00	0	24	6	0	5	0	0	0	1	0	0	0	0	36	22:00	0	3	2	0	0	0	0	0	0	0	0	5		
10:15	0	13	6	0	4	1	0	0	0	0	0	0	0	24	22:15	0	10	0	0	0	0	0	0	0	0	0	10		
10:30	0	28	7	0	4	1	0	0	0	0	0	0	0	40	22:30	0	4	0	0	0	0	0	0	0	0	0	4		
10:45	0	34	5	0	6	2	0	0	0	0	0	0	0	46	22:45	0	4	1	0	0	0	0	0	0	0	0	5		
11:00	0	20	5	0	5	1	0	0	1	0	0	0	0	31	23:00	0	1	1	0	0	0	0	0	0	0	0	1		
11:15	0	46	7	0	3	0	0	0	0	0	0	0	0	56	23:15	0	2	1	0	0	0	0	0	0	0	0	3		
11:30	0	28	9	0	4	1	0	0	1	0	0	0	0	43	23:30	0	5	1	0	0	0	0	0	0	0	0	6		
11:45	0	35	7	0	8	0	0	0	2	0	0	0	0	52	23:45	0	3	0	0	0	0	0	0	0	0	0	3		
TOTAL	1	1,006	224	6	168	14	0	4	21	0	2	1	0	1,446	TOTAL	2	1,313	253	9	123	6	1	5	18	0	0	0	0	1,730

AM PEAK HOUR 7:15 AM
AM PEAK VOLUME 350

PM PEAK HOUR 3:00 PM
PM PEAK VOLUME 321

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	3	2,319	476	15	291	21	1	9	39	0	2	1	0	3,176
% OF TOTAL	0.1%	73.0%	15.0%	0.5%	9.1%	0.6%	0.0%	0.3%	1.2%	0.0%	0.1%	0.0%	0.0%	100.0%

Class **1** **2** **3** **4** **5** **6** **7** **8** **9** **10** **11** **12** **13**

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

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

DATE: Tuesday, January 22, 2019
JOB #: SC2048

LOCATION#
CLASS14 Ethanac between Dawson and Antelope

AM TIME	EASTBOUND													TOTAL	PM Time	EASTBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3	12:00	0	34	8	0	2	0	1	0	1	0	0	0	46	
0:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3	12:15	0	37	4	0	3	0	0	0	1	0	0	0	45	
0:30	0	3	0	0	0	0	0	0	0	0	0	0	0	3	12:30	0	38	9	0	1	0	0	0	2	0	0	0	50	
0:45	0	3	0	0	0	0	0	0	0	0	0	0	0	3	12:45	1	39	9	0	1	2	0	0	1	0	0	0	53	
1:00	0	3	1	0	1	0	0	0	0	0	0	0	0	5	13:00	1	46	9	0	2	0	0	0	0	0	0	0	58	
1:15	0	8	0	0	0	0	0	0	0	0	0	0	0	8	13:15	0	43	9	0	3	0	0	0	0	0	0	0	55	
1:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1	13:30	0	48	7	0	5	1	0	0	0	0	0	0	61	
1:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13:45	0	64	9	0	3	1	0	0	0	0	0	0	77	
2:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1	14:00	0	40	12	0	1	0	0	0	2	0	1	0	56	
2:15	0	1	1	0	0	0	0	0	0	0	0	0	0	2	14:15	0	54	10	0	1	0	0	1	0	0	0	0	66	
2:30	0	7	0	0	0	0	0	0	0	0	0	0	0	7	14:30	1	68	10	1	1	0	0	0	0	1	0	0	82	
2:45	0	4	2	0	0	0	0	0	0	0	0	0	0	6	14:45	0	63	7	0	1	0	0	0	1	0	0	0	72	
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15:00	0	61	12	0	8	0	0	0	2	0	0	0	83	
3:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2	15:15	0	47	12	0	2	1	0	0	1	0	1	0	64	
3:30	0	5	1	0	0	0	0	0	0	0	0	0	0	6	15:30	0	60	18	0	4	0	0	0	1	0	0	0	83	
3:45	0	7	1	0	0	0	0	0	0	0	0	0	0	8	15:45	0	55	13	0	1	0	0	0	2	0	0	0	71	
4:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4	16:00	0	53	14	0	2	0	1	0	1	0	0	0	71	
4:15	0	4	1	0	0	0	0	0	0	0	0	0	0	5	16:15	0	60	9	0	2	0	1	0	1	0	0	0	73	
4:30	0	13	1	0	1	0	0	0	0	0	0	0	0	15	16:30	0	68	15	0	2	0	0	0	1	0	2	0	88	
4:45	0	20	3	0	1	0	0	0	0	0	0	0	0	24	16:45	0	62	9	0	4	0	0	0	0	0	0	0	75	
5:00	0	14	4	0	1	0	0	0	0	0	0	0	0	19	17:00	0	53	10	0	6	0	0	0	0	0	0	0	69	
5:15	0	10	2	0	3	0	0	0	0	0	0	0	0	15	17:15	0	59	5	0	2	0	0	0	0	0	0	0	66	
5:30	0	15	4	0	2	0	0	0	0	0	0	0	0	21	17:30	0	60	7	0	1	0	0	0	0	0	0	0	68	
5:45	0	12	2	0	2	1	0	0	0	0	0	0	0	17	17:45	0	52	11	0	3	0	0	0	0	0	0	0	66	
6:00	0	16	3	0	0	0	1	0	0	0	0	0	0	20	18:00	0	62	17	0	0	0	0	0	0	0	0	0	79	
6:15	0	25	6	0	2	1	0	1	0	0	0	0	0	35	18:15	0	51	5	0	1	0	0	0	0	0	0	0	57	
6:30	0	34	4	0	5	0	0	0	0	0	0	0	0	43	18:30	1	46	9	0	1	0	0	0	0	0	0	0	57	
6:45	0	45	12	1	3	0	0	1	1	0	0	0	0	63	18:45	0	47	7	0	0	0	0	0	0	0	0	0	54	
7:00	0	99	18	0	1	0	0	0	0	0	0	0	0	118	19:00	0	24	5	0	4	1	0	0	0	0	0	0	34	
7:15	0	107	17	0	2	0	0	0	0	0	0	0	0	126	19:15	0	30	5	0	0	0	0	0	0	0	0	0	35	
7:30	0	58	19	1	4	0	0	1	1	0	0	0	0	84	19:30	0	26	3	0	3	0	0	0	0	0	0	0	32	
7:45	2	47	10	0	1	1	0	0	1	0	0	0	0	62	19:45	1	30	6	0	1	0	0	0	0	0	0	0	38	
8:00	0	25	5	0	2	0	0	0	2	0	0	0	1	35	20:00	0	23	5	0	1	0	0	0	0	0	0	0	29	
8:15	0	34	9	1	0	0	0	0	0	0	0	0	0	44	20:15	0	26	2	0	1	0	0	0	0	0	0	0	29	
8:30	0	38	8	0	1	0	1	0	0	0	0	0	0	48	20:30	0	6	7	0	0	0	0	0	1	0	0	0	14	
8:45	0	29	3	1	4	0	0	0	0	0	0	0	0	37	20:45	0	17	2	0	0	0	0	0	0	0	0	0	19	
9:00	0	20	10	0	0	0	0	0	0	0	0	0	0	30	21:00	0	8	3	0	0	0	0	0	0	0	0	0	11	
9:15	0	26	3	0	5	0	0	0	1	0	0	0	0	35	21:15	0	14	3	0	0	0	0	0	0	0	0	0	17	
9:30	0	31	8	0	2	0	0	0	1	0	0	0	0	41	21:30	0	23	0	0	0	0	0	0	0	0	0	0	23	
9:45	0	30	13	0	2	1	0	0	1	0	0	0	0	47	21:45	0	12	2	0	0	0	0	0	0	0	0	0	14	
10:00	1	25	3	0	0	0	0	0	1	0	0	0	0	30	22:00	0	16	0	0	0	0	0	0	0	0	0	0	16	
10:15	0	25	3	0	3	2	0	0	1	0	0	0	0	34	22:15	0	14	0	0	0	0	0	0	0	0	0	0	14	
10:30	0	23	5	0	4	1	0	0	0	0	0	0	0	33	22:30	0	16	0	0	0	0	0	0	0	0	0	0	16	
10:45	0	24	3	0	2	0	1	0	2	0	0	0	0	32	22:45	0	3	0	0	0	0	0	0	0	0	0	0	3	
11:00	0	36	5	0	1	0	1	0	1	0	0	1	0	45	23:00	0	5	0	0	0	0	0	0	0	0	0	0	5	
11:15	0	28	3	0	4	0	0	1	2	0	0	0	0	38	23:15	0	5	1	0	0	0	0	0	0	0	0	0	6	
11:30	0	34	8	1	2	0	0	0	0	0	0	0	0	45	23:30	0	5	1	0	0	0	0	0	0	0	0	0	6	
11:45	0	40	7	0	1	0	0	0	0	0	0	0	0	48	23:45	0	5	0	0	0	0	0	0	0	0	0	0	5	
TOTAL	3	1,040	210	5	62	7	4	4	14	0	0	1	1	1,351	TOTAL	5	1,778	321	1	73	6	3	1	18	0	5	0	0	2,211

AM PEAK HOUR 6:45 AM
AM PEAK VOLUME 391

PM PEAK HOUR 4:00 PM
PM PEAK VOLUME 307

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	8	2,818	531	6	135	13	7	5	32	0	5	1	1	3,562
% OF TOTAL	0.2%	79.1%	14.9%	0.2%	3.8%	0.4%	0.2%	0.1%	0.9%	0.0%	0.1%	0.0%	0.0%	100.0%

Class	1	2	3	4	5	6	7	8	9	10	11	12	13
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TOTAL: ALL	9	4,868	945	20	410	31	7	14	64	0	7	2	1	6,378
% OF TOTAL	0.3%	136.7%	26.5%	0.6%	11.5%	0.9%	0.2%	0.4%	1.8%	0.0%	0.2%	0.1%	0.0%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

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

DATE: Tuesday, January 22, 2019
JOB #: SC2048

LOCATION#
CLASS14 Ethanac between Dawson and Antelope

AM TIME	WESTBOUND													TOTAL	PM Time	WESTBOUND													TOTAL			
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13				
0:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3	12:00	0	31	4	0	3	0	0	0	0	0	0	0	38				
0:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2	12:15	0	25	3	1	5	0	0	0	0	0	0	34					
0:30	0	2	0	0	1	0	0	0	0	0	0	0	0	3	12:30	0	25	6	0	7	0	0	0	1	0	0	39					
0:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2	12:45	0	26	4	2	1	0	0	0	1	0	0	34					
1:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2	13:00	0	23	3	0	4	0	0	0	0	0	0	30					
1:15	0	0	2	0	0	0	0	0	0	0	0	0	0	2	13:15	0	29	6	0	1	0	0	1	0	0	0	37					
1:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13:30	0	33	7	0	2	0	0	1	0	0	0	43					
1:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13:45	0	23	3	0	2	0	0	0	1	0	0	29					
2:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1	14:00	0	28	4	0	6	1	0	0	0	0	0	39					
2:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14:15	0	43	3	0	6	0	0	0	4	0	0	56					
2:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14:30	0	60	8	0	9	1	0	0	1	0	0	79					
2:45	0	1	1	0	0	0	0	0	0	0	0	0	0	2	14:45	0	36	9	1	5	0	0	0	0	0	0	51					
3:00	0	1	0	0	1	0	0	0	0	0	0	0	0	2	15:00	0	37	14	0	7	0	0	1	2	0	0	61					
3:15	0	2	2	0	0	0	0	0	0	1	0	0	0	5	15:15	1	52	14	0	2	0	0	0	0	0	0	69					
3:30	0	6	1	0	1	0	0	0	0	0	0	0	0	8	15:30	0	65	8	2	7	0	0	0	2	0	0	84					
3:45	0	9	5	0	0	0	0	0	0	0	0	1	0	15	15:45	0	61	14	0	6	0	0	0	0	0	0	81					
4:00	0	10	0	0	2	1	0	0	0	0	0	0	0	13	16:00	0	32	13	0	6	0	0	0	0	0	0	51					
4:15	0	11	2	0	1	0	0	0	2	0	0	0	0	16	16:15	0	38	6	0	4	1	0	0	0	0	0	49					
4:30	0	9	1	1	3	0	0	0	0	0	0	0	0	14	16:30	0	37	4	1	2	0	0	0	3	0	0	47					
4:45	0	15	1	0	4	0	0	0	1	0	0	0	0	21	16:45	0	49	4	0	2	2	0	0	0	0	0	57					
5:00	0	7	5	0	4	0	0	0	0	0	1	0	0	17	17:00	0	41	5	0	5	0	0	1	0	0	0	52					
5:15	0	14	5	0	4	0	0	0	2	0	0	0	0	25	17:15	0	49	10	1	5	0	0	0	0	0	0	65					
5:30	0	13	5	0	10	0	0	0	1	0	0	0	0	29	17:30	0	42	11	0	4	0	0	0	0	0	0	57					
5:45	0	25	5	0	5	0	0	0	0	0	0	0	0	35	17:45	0	37	6	0	5	0	0	0	0	0	0	48					
6:00	0	18	7	1	6	1	0	0	1	0	0	0	0	34	18:00	0	23	6	0	3	0	0	0	0	0	0	32					
6:15	0	14	5	0	5	0	0	0	0	0	0	0	0	24	18:15	0	20	7	0	1	0	0	1	0	0	0	29					
6:30	0	28	7	1	3	0	0	0	0	0	0	0	0	39	18:30	0	15	1	0	0	0	0	0	0	0	0	16					
6:45	0	30	4	0	5	0	0	0	0	0	0	0	0	39	18:45	0	19	1	0	2	0	0	0	0	0	0	22					
7:00	0	46	10	0	4	0	0	0	1	0	0	0	0	61	19:00	0	21	2	0	0	0	0	0	0	0	0	23					
7:15	0	44	11	0	6	3	0	0	1	0	0	0	0	65	19:15	0	19	3	1	0	0	0	0	1	0	0	24					
7:30	0	60	10	0	9	1	0	0	0	0	0	0	0	80	19:30	0	10	2	0	1	0	0	0	0	0	0	13					
7:45	0	78	18	0	8	0	0	0	0	0	0	0	0	104	19:45	0	14	3	0	0	0	0	0	0	0	0	17					
8:00	0	66	12	0	8	0	0	1	0	0	0	0	0	87	20:00	0	10	1	0	1	0	0	0	0	0	0	12					
8:15	0	29	7	0	4	1	0	0	0	0	0	0	0	41	20:15	0	7	2	0	2	0	0	0	0	0	0	11					
8:30	0	30	6	1	4	0	0	0	0	0	0	0	0	41	20:30	0	4	4	0	0	0	0	0	0	0	0	8					
8:45	0	36	7	0	3	1	0	0	0	0	0	1	0	48	20:45	0	9	2	0	2	0	0	0	0	0	0	13					
9:00	0	21	3	0	7	0	0	0	0	0	0	0	0	31	21:00	0	10	2	0	0	0	0	0	0	0	0	12					
9:15	0	22	7	0	4	0	0	0	0	0	0	0	0	33	21:15	0	10	1	0	1	0	0	0	0	0	0	12					
9:30	0	26	7	0	2	0	0	1	0	0	0	0	0	36	21:30	0	3	0	0	0	0	0	0	0	0	0	3					
9:45	0	24	4	1	6	0	0	2	1	0	0	0	0	38	21:45	0	11	2	0	0	0	0	0	0	0	0	13					
10:00	0	19	3	0	5	0	0	0	1	0	0	0	0	28	22:00	0	0	2	0	0	0	0	0	0	0	0	2					
10:15	0	11	5	0	3	1	0	0	0	0	0	0	0	20	22:15	0	9	0	0	0	0	0	0	0	0	0	9					
10:30	0	25	7	0	4	1	0	0	0	0	0	0	0	37	22:30	0	3	0	0	0	0	0	0	0	0	0	3					
10:45	0	28	4	0	5	1	0	0	0	0	0	0	0	38	22:45	0	4	1	0	0	0	0	0	0	0	0	5					
11:00	0	15	3	0	4	1	0	0	1	0	0	0	0	24	23:00	0	0	0	0	0	0	0	0	0	0	0	0					
11:15	0	40	6	0	3	0	0	0	0	0	0	0	0	49	23:15	0	2	0	0	0	0	0	0	0	0	0	2					
11:30	0	23	8	0	5	1	0	0	1	0	0	0	0	38	23:30	0	5	1	0	0	0	0	0	0	0	0	6					
11:45	0	30	6	0	7	0	0	0	2	0	0	0	0	45	23:45	0	2	0	0	0	0	0	0	0	0	0	2					
TOTAL	0	898	202	5	156	13	0	4	16	0	2	1	0	1,297	TOTAL	1	1,152	212	9	119	5	0	5	16	0	0	0	0	0	0	0	1,519

AM PEAK HOUR 7:15 AM
AM PEAK VOLUME 336

PM PEAK HOUR 3:00 PM
PM PEAK VOLUME 295

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	1	2,050	414	14	275	18	0	9	32	0	2	1	0	2,816
% OF TOTAL	0.0%	72.8%	14.7%	0.5%	9.8%	0.6%	0.0%	0.3%	1.1%	0.0%	0.1%	0.0%	0.0%	100.0%

Class **1** **2** **3** **4** **5** **6** **7** **8** **9** **10** **11** **12** **13**

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

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

DATE: Tuesday, January 22, 2019
JOB #: SC2048

LOCATION#
CLASS18 Matthews between Antelope and Palomar

AM TIME	NORTHBOUND													TOTAL	PM Time	NORTHBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	3	0	0	1	0	0	0	0	0	0	0	0	4	12:00	4	30	6	0	3	0	1	0	0	0	0	44		
0:15	0	2	1	0	0	0	0	0	0	0	0	0	0	3	12:15	3	33	3	0	6	1	0	0	0	0	0	46		
0:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2	12:30	3	31	8	1	1	0	0	0	1	1	0	46		
0:45	0	3	0	0	0	0	0	0	0	0	0	0	0	3	12:45	0	40	5	0	6	1	0	0	1	0	0	53		
1:00	0	3	1	0	1	0	0	0	0	0	0	0	0	5	13:00	4	45	7	0	3	0	0	0	0	0	0	59		
1:15	0	8	0	0	0	0	0	0	0	0	0	0	0	8	13:15	5	34	9	0	5	0	0	0	0	0	0	53		
1:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1	13:30	4	41	7	1	7	0	0	0	0	0	0	60		
1:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13:45	4	65	3	0	5	0	1	0	0	0	0	78		
2:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1	14:00	3	43	7	0	4	0	0	0	1	0	0	59		
2:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1	14:15	1	53	11	0	3	0	0	1	0	0	0	69		
2:30	0	7	1	0	0	0	0	1	0	0	0	0	0	9	14:30	7	61	5	0	4	0	0	0	0	0	0	77		
2:45	0	0	2	0	1	0	0	0	0	0	0	0	0	3	14:45	0	65	5	0	10	0	0	0	1	0	0	81		
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15:00	1	61	5	1	9	0	0	0	0	0	0	77		
3:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2	15:15	1	47	7	0	9	0	0	0	0	0	0	64		
3:30	0	2	2	0	0	0	0	0	0	0	0	0	0	4	15:30	3	60	13	2	10	0	0	0	0	0	0	88		
3:45	0	7	1	0	0	0	0	0	0	0	0	0	0	8	15:45	1	44	15	0	4	0	0	0	0	0	0	64		
4:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4	16:00	1	53	13	1	9	0	1	0	0	0	0	78		
4:15	0	3	1	0	0	0	0	0	0	0	0	0	0	4	16:15	0	63	11	1	5	0	0	0	0	0	0	80		
4:30	0	4	4	0	0	0	0	0	0	0	0	0	0	8	16:30	1	70	10	1	10	0	0	0	1	0	0	94		
4:45	0	15	4	0	0	0	0	0	0	0	0	0	0	19	16:45	0	58	5	0	11	0	0	0	0	0	0	74		
5:00	0	5	0	0	2	0	0	0	0	0	0	0	0	7	17:00	2	49	7	0	10	0	0	0	0	0	0	68		
5:15	0	5	1	0	3	0	0	0	0	0	0	0	0	9	17:15	0	60	8	0	2	0	0	0	0	0	0	70		
5:30	0	5	1	0	4	0	0	0	0	0	0	0	0	10	17:30	0	60	7	1	4	0	0	0	0	0	0	72		
5:45	0	9	2	0	1	0	0	0	0	0	0	0	0	12	17:45	0	49	11	0	11	0	0	0	0	0	0	71		
6:00	0	13	4	1	1	0	0	0	1	0	0	0	0	20	18:00	1	54	17	0	9	0	0	0	0	0	0	81		
6:15	0	19	8	0	4	0	0	0	1	0	0	0	0	32	18:15	1	41	13	0	2	0	0	0	0	0	0	57		
6:30	2	23	4	0	5	0	0	0	0	0	0	0	0	34	18:30	1	40	14	1	3	0	0	0	0	0	0	59		
6:45	1	44	7	1	7	0	0	1	1	0	0	0	0	62	18:45	2	40	9	0	4	0	0	0	0	0	0	55		
7:00	0	91	12	0	10	0	0	0	0	0	0	0	0	113	19:00	0	22	7	0	5	0	0	0	0	0	0	34		
7:15	0	100	19	1	7	0	0	0	0	0	0	0	0	127	19:15	0	24	9	1	2	0	0	0	0	0	0	36		
7:30	0	57	10	0	15	0	0	0	1	0	0	0	0	83	19:30	0	22	5	1	3	0	0	0	0	0	0	31		
7:45	1	53	10	0	5	0	0	0	1	0	0	0	0	70	19:45	1	27	4	0	6	0	0	0	0	0	0	38		
8:00	1	26	6	0	4	0	0	0	1	0	0	0	0	38	20:00	1	22	5	0	2	0	0	0	0	0	0	30		
8:15	0	26	8	2	5	0	0	1	0	0	0	0	0	42	20:15	0	24	2	0	3	0	0	0	0	0	0	29		
8:30	1	35	4	0	7	0	1	0	0	0	0	0	0	48	20:30	0	7	1	0	6	0	0	0	1	0	0	15		
8:45	2	30	3	1	6	0	0	0	0	0	0	0	0	42	20:45	0	13	2	1	1	0	0	0	0	0	0	17		
9:00	1	13	5	0	4	0	0	0	0	0	0	0	0	23	21:00	0	12	3	0	0	0	0	0	0	0	0	15		
9:15	0	27	6	0	4	1	0	0	1	0	0	0	0	39	21:15	0	12	3	0	2	0	0	0	0	0	0	17		
9:30	0	27	9	1	4	0	0	0	0	0	0	0	0	41	21:30	0	21	4	0	0	0	0	0	0	0	0	25		
9:45	2	26	8	1	7	1	0	0	1	0	0	0	0	46	21:45	0	12	1	1	1	0	0	0	0	0	0	15		
10:00	2	23	5	0	2	0	0	0	0	0	0	0	0	32	22:00	0	16	0	0	0	0	0	0	0	0	0	16		
10:15	0	26	3	1	4	0	1	0	0	0	0	0	0	35	22:15	0	12	1	0	0	0	0	0	0	0	0	13		
10:30	2	25	1	0	8	1	0	0	0	0	0	0	0	37	22:30	0	15	2	0	0	0	0	0	0	0	0	17		
10:45	3	26	5	0	2	0	1	0	0	0	0	0	0	37	22:45	0	4	0	1	1	0	0	0	0	0	0	6		
11:00	6	30	5	0	3	0	0	0	1	0	0	0	0	45	23:00	0	3	0	0	0	0	0	0	0	0	0	3		
11:15	0	26	6	0	4	0	1	0	1	0	0	0	0	38	23:15	0	6	0	0	1	0	0	0	0	0	0	7		
11:30	3	24	10	1	4	0	0	0	0	0	0	0	0	42	23:30	0	4	1	0	1	0	0	0	0	0	0	6		
11:45	4	28	9	1	2	0	0	0	0	0	0	0	0	44	23:45	0	4	1	0	0	0	0	0	0	0	0	5		
TOTAL	31	909	188	11	138	3	4	3	10	0	0	0	0	1,297	TOTAL	55	1,672	292	15	203	2	3	1	6	1	0	1	1	2,252

AM PEAK HOUR 7:00 AM
AM PEAK VOLUME 393

PM PEAK HOUR 4:00 PM
PM PEAK VOLUME 326

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	86	2,581	480	26	341	5	7	4	16	1	0	1	1	3,549
% OF TOTAL	2.4%	72.7%	13.5%	0.7%	9.6%	0.1%	0.2%	0.1%	0.5%	0.0%	0.0%	0.0%	0.0%	100.0%

Class	1	2	3	4	5	6	7	8	9	10	11	12	13
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TOTAL: ALL	90	4,636	839	39	670	27	7	13	38	1	0	2	2	6,364
% OF TOTAL	2.5%	130.6%	23.6%	1.1%	18.9%	0.8%	0.2%	0.4%	1.1%	0.0%	0.0%	0.1%	0.1%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

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

DATE: Tuesday, January 22, 2019
JOB #: SC2048

LOCATION#
CLASS18 Matthews between Antelope and Palomar

AM TIME	SOUTHBOUND													TOTAL	PM Time	SOUTHBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3	12:00	0	25	4	0	3	0	0	0	0	0	0	0	32	
0:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3	12:15	0	21	5	1	4	1	0	0	0	0	0	32		
0:30	0	2	0	0	1	0	0	0	0	0	0	0	0	3	12:30	0	25	2	0	8	1	0	0	1	0	0	37		
0:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1	12:45	0	23	3	1	1	0	0	0	1	0	0	29		
1:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2	13:00	0	26	2	0	3	0	0	0	1	0	0	32		
1:15	0	0	2	0	0	0	0	0	0	0	0	0	0	2	13:15	0	32	5	0	2	0	0	0	0	0	0	39		
1:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13:30	0	38	5	0	5	0	0	0	0	0	0	48		
1:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13:45	0	23	1	0	2	0	0	0	0	0	0	26		
2:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1	14:00	0	29	6	0	5	1	0	1	0	0	0	42		
2:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14:15	1	45	1	0	6	1	0	0	3	0	0	57		
2:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1	14:30	0	68	11	0	9	1	0	0	0	0	0	89		
2:45	0	1	1	0	0	0	0	0	0	0	0	0	0	2	14:45	0	41	11	1	6	0	0	0	0	0	0	59		
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15:00	0	36	13	0	9	1	0	1	1	0	0	61		
3:15	0	2	2	0	0	0	0	0	0	0	0	0	0	4	15:15	0	56	9	0	4	0	0	0	0	0	0	69		
3:30	0	6	1	0	1	0	0	0	0	0	0	0	0	8	15:30	0	60	7	2	7	2	0	0	1	0	0	79		
3:45	1	9	4	0	1	0	0	0	0	0	0	0	0	15	15:45	0	60	11	0	8	0	0	0	0	0	0	79		
4:00	0	10	0	0	2	1	0	0	0	0	0	0	0	13	16:00	0	33	11	0	6	0	0	0	0	0	0	50		
4:15	0	11	1	0	3	0	0	0	1	0	0	0	0	16	16:15	0	40	7	0	6	1	0	0	0	0	0	54		
4:30	0	9	0	1	4	0	0	0	0	0	0	0	0	14	16:30	0	39	2	0	3	0	0	0	3	0	0	47		
4:45	0	14	1	0	3	0	0	0	0	0	0	0	0	18	16:45	0	35	8	0	3	1	0	0	0	0	0	47		
5:00	0	8	4	0	4	0	0	0	0	0	0	0	0	16	17:00	0	35	6	0	2	0	0	1	0	0	0	44		
5:15	0	16	4	0	0	0	0	0	0	0	0	0	0	20	17:15	0	47	10	1	5	0	0	0	0	0	0	63		
5:30	0	14	5	0	6	0	0	0	1	0	0	0	0	26	17:30	0	29	7	0	5	0	0	0	0	0	0	41		
5:45	0	25	4	0	5	0	0	0	0	0	0	0	0	34	17:45	0	34	5	0	6	0	0	0	0	0	0	45		
6:00	0	17	6	1	9	1	0	0	0	0	0	0	0	34	18:00	0	21	6	0	3	0	0	0	0	0	0	30		
6:15	0	14	5	0	5	0	0	0	0	0	0	0	0	24	18:15	0	22	8	0	1	0	0	1	0	0	0	32		
6:30	0	32	4	1	7	0	0	0	0	0	0	0	0	44	18:30	0	15	1	0	1	0	0	0	0	0	0	17		
6:45	0	37	3	0	6	0	0	0	0	0	0	0	0	46	18:45	0	17	2	0	2	0	0	0	0	0	0	21		
7:00	0	42	9	1	6	0	0	0	1	0	0	0	0	59	19:00	0	22	3	0	0	0	0	0	0	0	0	25		
7:15	0	48	8	0	7	1	0	0	2	0	0	0	0	66	19:15	0	17	1	1	1	0	0	0	1	0	0	21		
7:30	0	72	6	0	10	1	0	0	0	0	0	0	0	89	19:30	0	9	3	0	1	0	0	0	0	0	0	13		
7:45	0	84	14	0	14	0	0	0	0	0	0	0	0	112	19:45	0	11	2	0	0	0	0	0	0	0	0	13		
8:00	0	63	10	0	13	0	0	2	0	0	0	0	0	88	20:00	0	11	1	0	3	0	0	0	0	0	0	15		
8:15	0	30	6	0	7	1	0	0	0	0	0	0	0	44	20:15	0	8	2	0	2	0	0	0	0	0	0	12		
8:30	0	30	6	0	7	0	0	0	1	0	0	0	0	44	20:30	0	4	3	0	1	0	0	0	0	0	0	8		
8:45	1	44	9	0	4	1	0	0	0	0	0	1	0	60	20:45	0	9	2	0	1	0	0	0	0	0	0	12		
9:00	0	22	0	0	5	0	0	0	0	0	0	0	0	27	21:00	0	10	2	0	0	0	0	0	0	0	0	12		
9:15	0	22	4	0	7	0	0	0	0	0	0	0	0	33	21:15	0	10	1	0	2	0	0	0	0	0	0	13		
9:30	0	24	6	0	5	0	0	0	0	0	0	0	0	35	21:30	0	3	0	0	1	0	0	0	0	0	0	4		
9:45	0	22	5	2	5	0	0	2	1	0	0	0	0	37	21:45	0	11	1	0	0	0	0	0	0	0	0	12		
10:00	0	21	3	0	5	0	0	1	0	0	0	0	0	30	22:00	0	1	1	0	0	0	0	0	0	0	0	2		
10:15	0	13	4	0	5	1	0	0	0	0	0	0	0	23	22:15	0	8	0	0	0	0	0	0	0	0	0	8		
10:30	0	25	4	0	7	1	0	0	0	0	0	0	0	37	22:30	0	3	0	0	0	0	0	0	0	0	0	3		
10:45	0	29	5	0	9	1	0	0	0	0	0	0	0	44	22:45	0	4	0	0	1	0	0	0	0	0	0	5		
11:00	0	14	4	0	1	1	0	1	0	0	0	0	1	22	23:00	0	0	0	0	0	0	0	0	0	0	0	0		
11:15	1	35	5	0	3	0	0	0	0	0	0	0	0	44	23:15	0	1	0	0	0	0	0	0	0	0	0	1		
11:30	0	23	8	0	4	2	0	0	0	0	0	0	0	37	23:30	0	4	1	0	0	0	0	0	0	0	0	5		
11:45	0	32	4	0	10	0	0	2	0	0	0	0	0	48	23:45	0	1	0	0	0	0	0	0	0	0	0	1		
TOTAL	3	933	167	6	191	12	0	5	10	0	0	1	1	1,329	TOTAL	1	1,122	192	7	138	10	0	4	12	0	0	0	0	1,486

AM PEAK HOUR 7:15 AM
AM PEAK VOLUME 355

PM PEAK HOUR 3:00 PM
PM PEAK VOLUME 288

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	4	2,055	359	13	329	22	0	9	22	0	0	1	1	2,815
% OF TOTAL	0.1%	73.0%	12.8%	0.5%	11.7%	0.8%	0.0%	0.3%	0.8%	0.0%	0.0%	0.0%	0.0%	100.0%

Class **1** **2** **3** **4** **5** **6** **7** **8** **9** **10** **11** **12** **13**

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

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

DATE: Tuesday, January 22, 2019
JOB #: SC2048

LOCATION#
CLASS26 Palomar between Case Road-SR-74 and Matthews

AM TIME	NORTHBOUND													TOTAL	PM Time	NORTHBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3	12:00	0	17	1	1	0	0	0	0	0	0	0	19		
0:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3	12:15	0	26	3	0	4	0	0	0	2	0	0	35		
0:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1	12:30	0	27	5	1	1	0	0	0	2	0	0	36		
0:45	0	3	0	0	0	0	0	0	0	0	0	0	0	3	12:45	0	29	4	0	1	1	0	0	1	0	0	36		
1:00	0	3	1	0	1	0	0	0	0	0	0	0	0	5	13:00	0	32	7	1	1	0	0	0	0	0	0	41		
1:15	0	7	0	0	0	0	0	0	0	0	0	0	0	7	13:15	0	33	8	0	1	0	0	0	0	0	0	42		
1:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1	13:30	0	38	6	1	3	0	0	0	0	0	0	48		
1:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13:45	0	30	1	0	1	0	0	0	0	0	0	32		
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14:00	0	36	10	1	0	0	0	0	0	1	0	48		
2:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1	14:15	0	69	10	0	1	2	1	0	1	0	0	84		
2:30	0	5	1	0	0	0	0	0	0	0	0	0	0	6	14:30	0	79	7	1	2	0	0	1	0	0	0	90		
2:45	0	2	2	0	0	0	0	0	0	0	0	0	0	4	14:45	0	62	8	0	1	1	0	0	1	0	1	74		
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15:00	0	57	11	1	1	0	0	0	0	0	0	70		
3:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15:15	0	44	7	0	3	0	0	0	0	1	0	55		
3:30	0	4	1	0	0	0	0	0	0	0	0	0	0	5	15:30	0	57	12	1	5	1	0	0	0	0	0	76		
3:45	0	3	0	0	0	0	0	0	0	0	0	0	0	3	15:45	0	52	9	0	2	0	0	0	0	0	0	63		
4:00	0	1	0	0	0	0	0	0	0	0	0	1	0	2	16:00	1	54	7	1	1	1	0	0	1	0	0	66		
4:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2	16:15	0	49	10	0	4	1	0	0	0	0	0	64		
4:30	0	5	1	0	0	0	0	0	0	0	0	0	0	6	16:30	0	52	9	0	0	0	0	0	1	0	0	62		
4:45	0	5	1	0	0	0	0	0	0	0	0	0	0	6	16:45	0	53	4	0	2	0	0	0	0	0	0	59		
5:00	0	4	1	0	1	0	0	0	0	0	0	0	0	6	17:00	1	51	9	1	4	0	0	0	0	0	0	66		
5:15	0	6	0	0	3	0	0	0	0	0	0	0	0	9	17:15	0	61	5	0	0	0	0	0	0	0	0	66		
5:30	0	8	2	0	2	0	0	0	0	0	0	1	0	13	17:30	0	55	7	1	1	0	0	0	0	0	0	64		
5:45	0	10	3	0	0	0	0	0	0	0	0	1	0	14	17:45	0	40	9	0	2	0	0	0	0	0	0	51		
6:00	0	13	0	0	1	0	0	0	2	0	0	0	0	16	18:00	0	46	10	1	0	0	0	0	0	0	0	57		
6:15	0	20	6	0	1	0	0	0	1	0	0	0	0	28	18:15	0	38	3	0	2	0	0	0	0	0	0	43		
6:30	0	20	1	1	3	0	0	0	2	0	0	0	0	27	18:30	0	35	8	0	1	0	0	0	0	0	0	44		
6:45	0	29	2	1	1	0	0	0	0	0	0	0	0	33	18:45	0	32	5	0	1	0	0	0	0	0	0	38		
7:00	0	69	13	0	1	0	0	0	1	0	0	0	0	84	19:00	0	23	2	0	3	0	0	0	0	0	0	28		
7:15	0	108	15	1	1	0	0	0	0	0	0	0	0	125	19:15	0	19	6	1	0	0	0	0	0	0	0	26		
7:30	0	68	12	0	6	0	0	1	1	0	0	0	0	88	19:30	0	17	3	1	0	0	0	0	0	0	0	21		
7:45	0	59	6	1	3	0	0	0	0	0	1	0	0	70	19:45	0	18	5	0	0	0	0	0	0	0	0	23		
8:00	0	31	3	1	2	0	0	0	1	0	0	0	0	38	20:00	0	20	5	1	0	0	0	0	0	0	0	26		
8:15	0	28	7	2	2	0	0	0	0	0	0	0	0	39	20:15	0	15	0	0	1	0	0	0	0	0	0	16		
8:30	0	26	5	0	2	0	0	0	1	0	0	0	0	34	20:30	0	7	4	0	0	0	0	0	1	0	0	12		
8:45	0	22	2	1	1	0	0	0	2	0	0	0	0	28	20:45	0	9	1	1	0	0	0	0	0	0	0	11		
9:00	0	19	5	0	0	0	0	0	0	0	0	0	0	24	21:00	0	13	3	0	0	0	0	0	0	0	0	16		
9:15	0	22	1	0	3	0	0	0	0	0	0	0	1	27	21:15	0	11	2	0	0	0	0	0	0	0	0	13		
9:30	0	26	5	0	2	0	0	0	2	0	0	0	0	35	21:30	0	12	1	0	0	0	0	0	0	0	0	13		
9:45	0	21	4	1	2	0	0	0	2	0	0	0	0	30	21:45	0	9	1	1	0	0	0	0	0	0	0	11		
10:00	0	23	5	0	2	0	0	0	0	0	0	0	0	30	22:00	0	13	0	0	0	0	0	0	0	0	0	13		
10:15	0	23	1	1	1	1	0	0	0	0	1	0	0	28	22:15	0	8	0	0	0	0	0	0	0	0	0	8		
10:30	0	20	3	1	3	0	0	0	0	0	0	0	0	27	22:30	0	12	1	0	0	0	0	0	0	0	0	13		
10:45	0	15	1	0	3	0	0	1	0	0	0	0	0	20	22:45	0	3	1	1	0	0	0	0	0	0	0	5		
11:00	1	22	9	1	0	0	0	0	1	0	0	1	0	35	23:00	0	3	0	0	0	0	0	0	0	0	0	3		
11:15	0	17	5	0	1	0	0	1	1	0	0	0	0	25	23:15	0	3	0	0	0	0	0	0	0	0	0	3		
11:30	0	24	6	1	1	2	1	0	1	0	0	0	0	36	23:30	0	4	1	0	0	0	0	0	0	0	0	5		
11:45	0	24	3	0	0	0	0	0	0	0	0	0	0	27	23:45	0	3	0	0	0	0	0	0	0	0	0	3		
TOTAL	1	825	134	13	49	3	1	3	18	0	5	1	1	1,054	TOTAL	2	1,476	231	18	49	7	1	1	10	0	3	0	0	1,798

AM PEAK HOUR
7:00 AM
AM PEAK VOLUME
367

PM PEAK HOUR
2:15 PM
PM PEAK VOLUME
318

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	3	2,301	365	31	98	10	2	4	28	0	8	1	1	2,852
% OF TOTAL	0.1%	80.7%	12.8%	1.1%	3.4%	0.4%	0.1%	0.1%	1.0%	0.0%	0.3%	0.0%	0.0%	100.0%

Class	1	2	3	4	5	6	7	8	9	10	11	12	13	
TOTAL: ALL	5	3,760	642	39	373	29	3	11	51	0	8	2	2	4,925
% OF TOTAL	0.2%	131.8%	22.5%	1.4%	13.1%	1.0%	0.1%	0.4%	1.8%	0.0%	0.3%	0.1%	0.1%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

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

DATE: Tuesday, January 22, 2019
JOB #: SC2048

LOCATION#
CLASS26 Palomar between Case Road-SR-74 and Matthews

AM TIME	SOUTHBOUND													TOTAL	PM Time	SOUTHBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3	12:00	0	18	2	1	4	0	0	0	1	0	0	0	26	
0:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3	12:15	0	27	2	0	3	1	0	0	0	0	0	33		
0:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1	12:30	0	14	2	0	4	0	0	0	0	0	0	20		
0:45	0	3	0	0	0	0	0	0	0	0	0	0	0	3	12:45	0	12	4	0	2	1	0	0	1	0	0	20		
1:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1	13:00	0	17	3	0	1	0	0	0	1	0	0	22		
1:15	0	0	1	0	0	0	0	0	0	0	0	0	0	1	13:15	0	27	3	0	6	2	0	1	2	0	0	41		
1:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13:30	0	19	3	0	5	2	0	0	0	0	0	29		
1:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13:45	0	29	4	0	3	1	0	0	0	0	0	37		
2:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1	14:00	1	24	3	0	2	1	0	0	0	0	1	32		
2:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14:15	0	27	2	0	3	0	0	0	0	0	0	32		
2:30	0	1	0	0	1	0	0	0	0	0	0	0	0	2	14:30	0	22	5	0	9	1	0	0	1	0	0	38		
2:45	0	1	1	0	0	0	0	0	0	0	0	0	0	2	14:45	0	26	6	1	5	1	0	0	2	0	0	41		
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15:00	0	19	9	0	7	0	0	0	0	0	0	35		
3:15	0	1	1	0	1	0	0	0	0	0	0	0	0	3	15:15	0	35	7	0	3	0	0	0	0	0	0	45		
3:30	0	8	1	0	0	0	0	0	0	0	0	0	0	9	15:30	0	42	3	1	5	0	0	0	1	0	0	52		
3:45	0	12	2	0	4	0	0	0	0	0	0	0	0	18	15:45	0	42	7	0	9	0	0	0	0	0	0	58		
4:00	0	7	0	0	1	0	0	0	0	0	0	0	0	8	16:00	0	45	8	0	5	0	0	0	0	0	0	58		
4:15	0	9	0	1	1	0	0	0	0	0	0	0	0	11	16:15	0	30	3	0	4	0	0	0	0	0	0	37		
4:30	0	8	1	0	2	0	0	0	0	0	0	0	0	11	16:30	0	29	8	0	4	1	0	0	0	0	0	42		
4:45	0	23	3	0	3	0	0	0	0	0	0	0	0	29	16:45	0	34	6	0	3	0	0	0	0	0	0	43		
5:00	0	8	4	0	5	0	0	0	0	0	0	0	0	17	17:00	0	31	3	0	0	0	0	0	0	0	0	34		
5:15	0	21	4	0	0	0	0	0	0	0	0	0	0	25	17:15	0	38	5	1	6	0	0	0	0	0	0	50		
5:30	0	6	1	0	4	0	0	0	0	0	0	0	0	11	17:30	0	25	5	0	6	0	0	0	0	0	0	36		
5:45	0	14	1	0	4	0	0	0	0	0	0	0	0	19	17:45	0	18	5	0	6	0	0	1	0	0	0	30		
6:00	0	15	2	0	7	0	0	0	0	0	0	0	0	24	18:00	0	16	8	0	2	0	0	0	0	0	0	26		
6:15	0	9	5	0	3	0	0	0	0	0	0	0	0	17	18:15	0	17	4	0	2	0	0	0	0	0	0	23		
6:30	0	18	2	0	4	1	0	0	0	0	0	0	0	25	18:30	0	12	1	0	1	0	0	0	0	0	0	14		
6:45	0	28	2	0	8	0	0	0	0	0	0	0	0	38	18:45	0	15	2	0	3	0	0	0	0	0	0	20		
7:00	0	29	7	1	5	1	0	0	1	0	0	0	0	44	19:00	0	19	2	0	4	0	0	0	0	0	0	25		
7:15	0	32	6	0	6	0	0	0	0	0	0	0	0	44	19:15	0	17	1	1	1	0	0	0	1	0	0	21		
7:30	0	33	6	0	4	1	0	0	0	0	0	0	1	45	19:30	0	7	1	0	2	0	0	0	0	0	0	10		
7:45	0	44	11	0	10	0	0	1	1	0	0	0	0	67	19:45	0	11	3	0	0	0	0	0	0	0	0	14		
8:00	0	27	11	0	6	0	1	0	1	0	0	0	0	46	20:00	0	4	2	0	3	0	0	0	0	0	0	9		
8:15	0	29	4	0	4	1	0	0	1	0	0	0	0	39	20:15	0	6	0	0	3	0	0	0	0	0	0	9		
8:30	0	21	7	0	4	0	0	1	1	0	0	0	0	34	20:30	0	4	2	0	2	0	0	0	0	0	0	8		
8:45	1	25	10	0	4	1	0	0	1	0	0	0	0	42	20:45	0	6	2	0	3	0	0	0	0	0	0	11		
9:00	0	15	2	0	3	0	0	0	1	0	0	0	0	21	21:00	0	7	1	0	0	0	0	0	0	0	0	8		
9:15	0	16	5	0	4	1	0	0	0	0	0	0	0	26	21:15	0	8	3	0	1	0	0	0	0	0	0	12		
9:30	0	17	6	1	5	0	0	0	0	0	0	0	0	29	21:30	0	5	0	0	1	0	0	0	0	0	0	6		
9:45	0	17	1	0	5	0	0	2	1	0	0	0	0	26	21:45	0	9	1	0	1	0	0	0	0	0	0	11		
10:00	0	18	2	0	2	0	0	0	0	0	0	0	0	22	22:00	0	2	1	0	0	0	0	0	0	0	0	3		
10:15	0	12	1	0	2	0	0	1	0	0	0	0	0	16	22:15	0	3	2	0	0	0	0	0	0	0	0	5		
10:30	0	12	4	0	6	0	0	0	0	0	0	0	0	22	22:30	0	1	0	0	0	0	0	0	0	0	0	1		
10:45	0	22	3	0	7	0	0	0	2	0	0	0	0	34	22:45	0	1	0	0	1	0	0	0	0	0	0	2		
11:00	0	10	6	0	1	0	0	0	1	0	0	0	0	18	23:00	0	0	0	0	0	0	0	0	0	0	0	0		
11:15	0	20	3	0	1	0	0	0	0	0	0	0	0	24	23:15	0	0	0	0	0	0	0	0	0	0	0	0		
11:30	0	21	2	0	3	1	0	0	1	0	0	0	0	28	23:30	0	4	0	0	0	0	0	0	0	0	0	4		
11:45	0	13	5	0	10	1	0	0	1	0	0	0	0	30	23:45	0	1	0	0	0	0	0	0	0	0	0	1		
TOTAL	1	634	133	3	140	8	1	5	13	0	0	0	1	939	TOTAL	1	825	144	5	135	11	0	2	10	0	0	1	1	1,134

AM PEAK HOUR 7:15 AM
AM PEAK VOLUME 202

PM PEAK HOUR 3:15 PM
PM PEAK VOLUME 213

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	2	1,459	277	8	275	19	1	7	23	0	0	1	1	2,073
% OF TOTAL	0.1%	70.4%	13.4%	0.4%	13.3%	0.9%	0.0%	0.3%	1.1%	0.0%	0.0%	0.0%	0.0%	100.0%

Class **1** **2** **3** **4** **5** **6** **7** **8** **9** **10** **11** **12** **13**

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

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

DATE: Tuesday, January 22, 2019
JOB #: SC2048

LOCATION#
CLASS22 Sherman between Case-SR-74 and Ethanac

AM TIME	NORTHBOUND													TOTAL	PM Time	NORTHBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4	12:00	0	21	4	0	4	0	0	0	0	0	0	29		
0:15	0	2	1	0	0	0	0	0	0	0	0	0	0	3	12:15	0	13	3	0	1	0	0	0	0	0	0	17		
0:30	0	0	1	0	0	0	0	0	0	0	0	0	0	1	12:30	0	10	5	0	0	0	0	0	0	0	0	15		
0:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2	12:45	0	16	6	0	0	0	0	0	1	0	0	23		
1:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2	13:00	0	18	2	0	5	0	0	0	0	0	0	25		
1:15	0	1	1	0	0	0	0	0	0	0	0	0	0	2	13:15	0	21	1	0	3	0	0	0	0	0	0	25		
1:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4	13:30	0	19	3	0	0	1	0	0	0	0	0	23		
1:45	0	2	1	0	0	0	0	0	0	0	0	0	0	3	13:45	0	22	12	0	2	0	0	0	0	0	0	36		
2:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3	14:00	0	24	11	0	1	0	0	0	0	0	0	36		
2:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1	14:15	0	28	8	0	3	0	0	0	0	0	0	39		
2:30	0	0	1	0	0	0	0	0	0	0	0	0	0	1	14:30	0	17	6	0	2	0	0	0	0	0	0	25		
2:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1	14:45	0	23	8	0	1	0	1	1	0	0	0	34		
3:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1	15:00	1	25	9	0	2	0	0	0	0	0	0	37		
3:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3	15:15	0	37	6	0	2	0	0	0	0	0	0	45		
3:30	0	14	1	0	0	0	0	0	0	0	0	0	0	15	15:30	0	21	4	0	4	0	0	0	0	0	0	29		
3:45	0	6	1	0	0	0	0	0	0	0	0	0	0	7	15:45	0	26	6	0	1	0	0	0	0	0	0	33		
4:00	0	4	1	0	0	0	0	0	0	0	0	0	0	5	16:00	0	23	10	0	0	0	0	0	0	0	0	33		
4:15	0	1	1	0	0	0	0	0	0	0	0	0	0	2	16:15	1	27	4	1	3	0	0	0	0	0	0	36		
4:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1	16:30	0	31	7	0	4	0	0	0	0	0	0	42		
4:45	0	4	3	0	0	0	0	0	0	0	0	0	0	7	16:45	0	27	3	0	1	0	0	0	0	0	0	31		
5:00	0	6	1	0	0	0	0	0	0	0	0	0	0	7	17:00	1	19	4	0	2	0	0	0	0	0	0	26		
5:15	0	4	2	0	2	0	0	0	0	0	0	0	0	8	17:15	0	32	6	0	2	0	0	0	0	0	0	40		
5:30	0	6	2	0	0	0	0	0	0	0	0	0	0	8	17:30	0	22	6	0	1	0	0	0	0	0	0	29		
5:45	0	7	2	0	3	0	0	0	0	0	0	0	0	12	17:45	0	22	5	0	2	0	0	0	0	0	0	29		
6:00	0	6	3	0	2	0	0	0	0	0	0	0	0	11	18:00	0	18	1	0	0	0	0	0	0	0	0	19		
6:15	0	3	3	0	2	0	0	0	0	0	0	0	0	8	18:15	0	15	2	0	1	0	0	0	0	0	0	18		
6:30	0	8	1	0	0	0	0	0	0	0	0	0	0	9	18:30	0	24	3	0	0	0	0	0	0	0	0	27		
6:45	0	11	2	0	1	0	0	0	0	0	0	0	0	14	18:45	0	16	3	0	1	0	0	0	0	0	0	20		
7:00	0	25	3	0	4	0	0	0	0	0	0	0	0	32	19:00	0	16	1	0	0	0	0	0	0	0	0	17		
7:15	0	22	4	0	4	0	0	1	0	0	0	0	0	31	19:15	0	9	3	0	1	0	0	0	0	0	0	13		
7:30	0	49	7	0	5	0	0	0	0	0	0	0	0	61	19:30	0	15	3	0	1	0	0	0	0	0	0	19		
7:45	0	41	5	0	6	0	0	0	1	0	0	0	0	53	19:45	0	11	0	0	0	0	0	0	0	0	0	11		
8:00	0	16	7	0	2	0	0	0	0	0	0	0	0	25	20:00	0	9	2	0	1	0	0	0	0	0	0	12		
8:15	0	15	5	0	0	1	0	0	1	0	0	0	0	22	20:15	0	17	1	0	0	0	0	0	0	0	0	18		
8:30	0	16	5	0	2	0	0	0	0	0	0	0	0	23	20:30	0	14	1	0	0	0	0	0	0	0	0	15		
8:45	0	11	4	0	1	0	0	0	0	0	0	0	0	16	20:45	0	11	1	0	0	0	0	0	0	0	0	12		
9:00	0	12	3	0	1	0	0	1	0	0	0	0	0	17	21:00	0	11	4	0	1	1	0	0	0	0	0	17		
9:15	0	10	3	0	0	0	0	0	0	0	0	0	0	13	21:15	0	6	1	0	0	0	0	0	0	0	0	7		
9:30	0	7	4	0	2	1	0	0	0	0	0	0	0	14	21:30	0	6	1	0	0	0	0	0	0	0	0	7		
9:45	0	10	5	0	0	0	0	0	0	0	0	0	0	15	21:45	0	13	0	0	0	0	0	0	0	0	0	13		
10:00	0	10	0	0	1	0	0	0	0	0	0	0	0	11	22:00	0	3	1	0	0	0	0	0	0	0	0	4		
10:15	0	19	3	0	2	0	0	0	0	0	0	0	0	24	22:15	0	7	1	0	0	0	0	0	0	0	0	8		
10:30	0	16	4	0	0	0	0	0	0	0	0	0	0	20	22:30	0	6	0	0	0	0	0	0	0	0	0	6		
10:45	0	15	5	0	3	0	0	0	0	0	0	0	0	23	22:45	0	6	2	0	0	0	0	0	0	0	0	8		
11:00	0	11	2	0	3	0	0	0	0	0	0	0	0	16	23:00	0	1	0	0	0	0	0	0	0	0	0	1		
11:15	0	14	4	0	3	0	0	0	0	0	0	0	0	21	23:15	0	3	0	0	0	0	0	0	0	0	0	3		
11:30	0	22	7	0	1	0	0	0	0	0	0	0	0	30	23:30	0	2	2	0	0	0	0	0	0	0	0	4		
11:45	0	25	5	0	0	0	0	0	0	0	0	0	0	30	23:45	0	3	1	0	0	0	0	0	0	0	0	4		
TOTAL	0	472	114	0	50	2	0	2	2	0	0	0	0	642	TOTAL	3	786	173	1	52	2	1	1	1	0	0	0	1,020	

AM PEAK HOUR 7:00 AM
AM PEAK VOLUME 177

PM PEAK HOUR 2:45 PM
PM PEAK VOLUME 145

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	3	1,258	287	1	102	4	1	3	3	0	0	0	0	1,662
% OF TOTAL	0.2%	75.7%	17.3%	0.1%	6.1%	0.2%	0.1%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	100.0%

Class	1	2	3	4	5	6	7	8	9	10	11	12	13
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TOTAL: ALL	3	2,306	495	5	192	6	1	3	3	0	0	0	0	3,014
% OF TOTAL	0.2%	138.7%	29.8%	0.3%	11.6%	0.4%	0.1%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

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

DATE: Tuesday, January 22, 2019
JOB #: SC2048

LOCATION#
CLASS23 Sherman between Ethanac and McLaughlin

AM TIME	NORTHBOUND													TOTAL	PM Time	NORTHBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12:00	0	4	2	0	2	0	0	0	0	0	0	0	8	
0:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12:15	0	3	0	0	0	0	0	0	0	0	0	0	3	
0:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12:30	0	2	3	0	0	0	0	0	0	0	0	0	5	
0:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12:45	0	1	0	0	5	0	0	0	2	0	0	0	8	
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13:00	0	2	0	0	1	0	0	0	0	0	0	0	3	
1:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13:15	0	1	0	0	0	0	0	1	0	2	0	0	4	
1:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13:30	0	2	3	0	4	0	0	0	0	1	0	0	10	
1:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13:45	0	2	0	0	4	0	0	0	0	0	0	0	6	
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14:00	0	1	3	0	1	0	0	0	0	0	0	0	5	
2:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	14:15	0	2	1	0	1	0	0	0	1	0	2	0	7	
2:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14:30	0	0	2	0	1	0	0	0	0	0	0	0	3	
2:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14:45	0	4	0	0	1	0	0	0	1	0	0	0	6	
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15:00	0	3	3	0	1	0	0	0	0	0	0	0	7	
3:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15:15	0	1	0	0	2	0	0	0	0	0	0	0	3	
3:30	1	0	0	0	0	0	0	0	0	0	0	0	0	0	15:30	0	5	1	0	3	0	0	0	0	0	0	0	9	
3:45	0	0	0	1	0	0	0	1	0	0	0	0	0	0	15:45	0	1	2	0	0	0	0	0	0	0	0	0	3	
4:00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	16:00	0	5	1	0	1	0	0	0	0	0	0	0	7	
4:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	16:15	0	2	1	0	0	0	0	0	1	0	0	0	4	
4:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16:30	0	5	2	0	3	0	0	0	0	0	0	0	10	
4:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16:45	0	1	0	0	3	0	0	0	0	0	0	0	4	
5:00	0	2	0	0	0	0	0	0	1	0	0	0	0	0	17:00	0	3	1	0	1	0	0	0	0	0	0	0	5	
5:15	0	0	0	0	1	0	0	0	0	0	0	0	0	0	17:15	0	2	2	0	0	0	0	0	0	0	0	0	4	
5:30	0	0	0	0	0	1	0	0	0	0	0	0	0	0	17:30	0	2	0	0	0	0	0	0	0	0	0	0	2	
5:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	17:45	0	1	0	0	0	0	0	0	0	0	0	0	1	
6:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:15	0	0	0	0	1	0	0	0	0	1	0	0	0	0	18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:30	0	0	0	0	0	0	0	0	2	0	2	0	0	0	18:30	0	0	0	0	1	0	0	0	0	0	0	0	1	
6:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:15	0	1	0	0	2	0	0	0	0	0	0	0	0	0	19:15	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:30	0	0	1	0	1	0	0	0	0	0	0	0	0	0	19:30	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:45	0	3	0	0	0	0	0	0	0	0	0	0	0	0	19:45	0	2	0	0	0	0	0	0	0	0	0	0	2	
8:00	0	1	0	0	1	0	0	0	1	0	0	0	0	0	20:00	0	1	0	0	0	0	0	0	0	0	0	0	1	
8:15	0	0	2	0	0	0	0	0	0	0	0	0	0	0	20:15	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20:30	0	0	0	0	1	0	0	0	0	0	0	0	1	
8:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	20:45	0	1	0	0	0	0	0	0	0	0	0	0	1	
9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:15	0	3	0	0	0	0	0	0	0	0	0	0	0	0	21:15	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21:30	0	2	0	0	0	0	0	0	0	0	0	0	2	
9:45	0	0	3	0	0	0	0	0	0	0	0	0	0	0	21:45	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:15	0	2	1	0	0	0	0	0	0	0	0	0	0	0	22:15	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:30	0	3	2	0	0	1	0	0	0	0	0	0	0	0	22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:45	0	1	0	0	1	0	0	0	0	1	0	0	0	0	22:45	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:00	0	1	0	0	2	1	0	0	0	0	0	0	0	0	23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:30	0	0	1	0	2	0	0	0	0	0	0	0	0	0	23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:45	0	1	1	0	3	0	0	0	0	0	0	0	0	0	23:45	0	1	0	0	0	0	0	0	0	0	0	0	0	
TOTAL	1	19	12	1	16	3	0	1	11	1	2	0	0	67	TOTAL	0	61	27	0	36	0	0	0	6	5	0	135		

AM PEAK HOUR 10:15 AM
AM PEAK VOLUME 16

PM PEAK HOUR 1:30 PM
PM PEAK VOLUME 28

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	1	80	39	1	52	3	0	1	17	1	7	0	0	202
% OF TOTAL	0.5%	39.6%	19.3%	0.5%	25.7%	1.5%	0.0%	0.5%	8.4%	0.5%	3.5%	0.0%	0.0%	100.0%

Class	1	2	3	4	5	6	7	8	9	10	11	12	13
--------------	----------	----------	----------	----------	----------	----------	----------	----------	----------	-----------	-----------	-----------	-----------

TOTAL: ALL	3	198	75	2	102	5	0	1	30	1	9	1	1	428
% OF TOTAL	1.5%	98.0%	37.1%	1.0%	50.5%	2.5%	0.0%	0.5%	14.9%	0.5%	4.5%	0.5%	0.5%	100.0%

	PM Volume 4-6			Daily			K
	NB/EB	SB/WB	Total	NB/EB	SB/WB	Total	
Sherman	37	13	50	202	226	428	11.68%

ok

Counts Unlimited, Inc.

City of Menifee
 Murrieta Road
 B/ Ethanac Road - McLaughlin Road
 24 Hour Directional Classification Count

PO Box 1178
 Corona, CA 92878
 Phone: (951) 268-6268
 email: counts@countsunlimited.com

MEN002
 Site Code: 067-21006

Eastbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
01/12/21	0	12	7	0	1	0	0	0	0	0	0	0	0	20
01:00	0	9	5	0	1	0	0	0	0	0	0	0	0	15
02:00	0	5	5	0	0	0	0	0	0	0	0	0	0	10
03:00	0	17	7	0	9	0	0	0	0	0	0	0	0	33
04:00	1	38	15	0	16	0	0	0	1	0	0	0	0	71
05:00	1	61	29	0	23	0	0	2	0	0	0	0	0	116
06:00	0	103	40	0	31	1	0	4	0	0	0	0	0	179
07:00	0	137	41	1	31	1	1	3	0	0	0	0	0	215
08:00	0	131	50	1	34	4	3	1	1	0	0	0	0	225
09:00	2	140	51	1	32	4	2	8	0	0	0	0	0	240
10:00	1	169	70	1	35	6	2	4	0	0	0	0	0	288
11:00	0	171	84	2	47	3	2	5	0	0	0	0	0	314
12 PM	1	195	70	3	31	2	2	5	1	0	0	0	0	310
13:00	0	173	69	3	35	4	4	3	0	0	0	0	0	291
14:00	3	208	75	1	49	1	2	8	0	0	0	0	0	347
15:00	2	217	100	5	40	3	1	2	0	0	0	0	0	370
16:00	1	188	81	2	33	0	0	4	0	0	0	0	0	309
17:00	0	167	49	2	19	1	0	0	0	0	0	0	0	238
18:00	0	118	35	1	12	0	0	3	0	0	0	0	0	169
19:00	0	83	28	1	17	0	0	1	0	0	0	0	0	130
20:00	0	61	19	0	7	0	0	0	0	0	0	0	0	87
21:00	0	60	14	0	7	0	0	0	0	0	0	0	0	81
22:00	0	31	4	0	2	0	0	0	0	0	0	0	0	37
23:00	0	15	4	0	2	0	0	1	0	0	0	0	0	22
Total	12	2509	952	24	514	30	19	54	3	0	0	0	0	4117
Percent	0.3%	60.9%	23.1%	0.6%	12.5%	0.7%	0.5%	1.3%	0.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak	09:00	11:00	11:00	11:00	11:00	10:00	08:00	09:00	04:00					11:00
Vol.	2	171	84	2	47	6	3	8	1					314
PM Peak	14:00	15:00	15:00	15:00	14:00	13:00	13:00	14:00	12:00					15:00
Vol.	3	217	100	5	49	4	4	8	1					370
Grand Total	12	2509	952	24	514	30	19	54	3	0	0	0	0	4117
Percent	0.3%	60.9%	23.1%	0.6%	12.5%	0.7%	0.5%	1.3%	0.1%	0.0%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

City of Menifee
 Murrieta Road
 B/ Ethanac Road - McLaughlin Road
 24 Hour Directional Classification Count

PO Box 1178
 Corona, CA 92878
 Phone: (951) 268-6268
 email: counts@countsunlimited.com

MEN002
 Site Code: 067-21006

Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
01/12/21	0	12	4	0	0	0	0	0	0	0	0	0	0	16
01:00	0	11	1	0	0	0	0	0	0	0	0	0	0	12
02:00	0	9	3	0	0	0	0	0	0	0	0	0	0	12
03:00	0	13	1	0	0	0	0	0	0	0	0	0	0	14
04:00	0	17	4	0	4	0	0	1	0	0	0	0	0	26
05:00	0	35	9	0	2	1	0	1	1	0	0	0	0	49
06:00	0	65	33	0	11	4	0	6	0	0	0	0	0	119
07:00	0	80	29	1	10	2	0	6	0	0	0	0	0	128
08:00	2	111	33	1	14	1	0	6	0	0	0	0	0	168
09:00	1	128	38	1	18	3	0	5	0	0	0	0	0	194
10:00	0	173	50	2	10	3	0	6	0	0	0	0	0	244
11:00	0	202	50	0	20	3	0	4	0	0	0	0	0	279
12 PM	0	193	43	2	14	2	0	3	0	0	0	0	0	257
13:00	0	195	52	0	9	3	0	4	0	0	0	0	0	263
14:00	2	220	60	0	14	2	0	1	0	0	0	0	0	299
15:00	1	229	59	2	21	1	0	1	0	0	0	0	0	314
16:00	2	265	82	1	14	2	0	1	0	0	0	0	0	367
17:00	1	255	66	1	14	0	0	0	0	0	0	0	0	337
18:00	0	145	52	0	12	0	0	1	0	0	0	0	0	210
19:00	0	116	19	0	2	0	0	0	0	0	0	0	0	137
20:00	0	66	17	0	5	0	0	0	0	0	0	0	0	88
21:00	0	45	10	0	0	0	0	0	0	0	0	0	0	55
22:00	0	44	5	0	1	0	0	0	0	0	0	0	0	50
23:00	1	24	1	0	1	0	0	0	0	0	0	0	0	27
Total	10	2653	721	11	196	27	0	46	1	0	0	0	0	3665
Percent	0.3%	72.4%	19.7%	0.3%	5.3%	0.7%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	08:00	11:00	10:00	10:00	11:00	06:00		06:00	05:00					11:00
Vol.	2	202	50	2	20	4		6	1					279
PM Peak	14:00	16:00	16:00	12:00	15:00	13:00		13:00						16:00
Vol.	2	265	82	2	21	3		4						367
Grand Total	10	2653	721	11	196	27	0	46	1	0	0	0	0	3665
Percent	0.3%	72.4%	19.7%	0.3%	5.3%	0.7%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

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City of Menifee
Murrieta Road
B/ Ethanac Road - McLaughlin Road
24 Hour Directional Classification Count

MEN002
Site Code: 067-21006

Eastbound, Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
01/12/21	0	24	11	0	1	0	0	0	0	0	0	0	0	36
01:00	0	20	6	0	1	0	0	0	0	0	0	0	0	27
02:00	0	14	8	0	0	0	0	0	0	0	0	0	0	22
03:00	0	30	8	0	9	0	0	0	0	0	0	0	0	47
04:00	1	55	19	0	20	0	0	1	1	0	0	0	0	97
05:00	1	96	38	0	25	1	0	3	1	0	0	0	0	165
06:00	0	168	73	0	42	5	0	10	0	0	0	0	0	298
07:00	0	217	70	2	41	3	1	9	0	0	0	0	0	343
08:00	2	242	83	2	48	5	3	7	1	0	0	0	0	393
09:00	3	268	89	2	50	7	2	13	0	0	0	0	0	434
10:00	1	342	120	3	45	9	2	10	0	0	0	0	0	532
11:00	0	373	134	2	67	6	2	9	0	0	0	0	0	593
12 PM	1	388	113	5	45	4	2	8	1	0	0	0	0	567
13:00	0	368	121	3	44	7	4	7	0	0	0	0	0	554
14:00	5	428	135	1	63	3	2	9	0	0	0	0	0	646
15:00	3	446	159	7	61	4	1	3	0	0	0	0	0	684
16:00	3	453	163	3	47	2	0	5	0	0	0	0	0	676
17:00	1	422	115	3	33	1	0	0	0	0	0	0	0	575
18:00	0	263	87	1	24	0	0	4	0	0	0	0	0	379
19:00	0	199	47	1	19	0	0	1	0	0	0	0	0	267
20:00	0	127	36	0	12	0	0	0	0	0	0	0	0	175
21:00	0	105	24	0	7	0	0	0	0	0	0	0	0	136
22:00	0	75	9	0	3	0	0	0	0	0	0	0	0	87
23:00	1	39	5	0	3	0	0	1	0	0	0	0	0	49
Total	22	5162	1673	35	710	57	19	100	4	0	0	0	0	7782
Percent	0.3%	66.3%	21.5%	0.4%	9.1%	0.7%	0.2%	1.3%	0.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak	09:00	11:00	11:00	10:00	11:00	10:00	08:00	09:00	04:00					11:00
Vol.	3	373	134	3	67	9	3	13	1					593
PM Peak	14:00	16:00	16:00	15:00	14:00	13:00	13:00	14:00	12:00					15:00
Vol.	5	453	163	7	63	7	4	9	1					684
Grand Total	22	5162	1673	35	710	57	19	100	4	0	0	0	0	7782
Percent	0.3%	66.3%	21.5%	0.4%	9.1%	0.7%	0.2%	1.3%	0.1%	0.0%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

City of Menifee
 McCall Boulevard
 B/ Interstate 215 Ramps
 24 Hour Directional Classification Count

PO Box 1178
 Corona, CA 92878
 Phone: (951) 268-6268
 email: counts@countsunlimited.com

MEN003
 Site Code: 067-21006

Eastbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
01/12/21	0	75	17	0	6	1	0	0	1	0	0	0	0	100
01:00	0	45	10	1	6	0	0	0	0	0	0	0	0	62
02:00	0	42	12	0	7	0	0	0	2	0	0	0	0	63
03:00	0	53	14	0	6	0	0	0	0	0	0	0	0	73
04:00	0	86	37	0	15	0	0	4	0	0	0	0	0	142
05:00	1	153	54	3	39	1	0	4	0	0	0	0	0	255
06:00	1	253	86	6	77	14	0	14	2	0	1	0	0	454
07:00	0	310	83	7	44	3	1	15	3	3	2	0	0	471
08:00	0	315	105	3	47	1	1	12	1	1	1	0	0	487
09:00	0	380	128	5	61	2	1	14	3	0	1	0	0	595
10:00	2	413	106	5	51	2	2	18	1	1	1	0	0	602
11:00	4	453	133	6	62	3	2	22	0	4	1	2	1	693
12 PM	7	508	158	6	64	8	0	22	0	4	5	0	1	783
13:00	5	511	154	3	60	6	0	20	4	0	2	3	0	768
14:00	4	564	149	5	66	6	2	24	2	2	2	1	0	827
15:00	3	602	200	6	68	3	4	28	0	3	5	0	0	922
16:00	7	625	191	5	79	4	2	25	0	4	1	2	1	946
17:00	7	690	173	6	77	4	4	25	0	2	3	0	0	991
18:00	4	588	135	3	58	4	3	21	2	1	0	1	0	820
19:00	2	354	90	1	49	0	0	10	0	3	0	0	0	509
20:00	2	312	75	2	31	0	0	6	0	0	0	0	0	428
21:00	0	234	59	1	16	0	0	2	0	0	0	0	0	312
22:00	0	178	42	4	14	0	0	1	1	0	0	0	0	240
23:00	0	109	21	0	6	0	0	0	0	0	0	0	0	136
Total	49	7853	2232	78	1009	62	22	287	22	28	25	9	3	11679
Percent	0.4%	67.2%	19.1%	0.7%	8.6%	0.5%	0.2%	2.5%	0.2%	0.2%	0.2%	0.1%	0.0%	
AM Peak	11:00	11:00	11:00	07:00	06:00	06:00	10:00	11:00	07:00	11:00	07:00	11:00	11:00	11:00
Vol.	4	453	133	7	77	14	2	22	3	4	2	2	1	693
PM Peak	12:00	17:00	15:00	12:00	16:00	12:00	15:00	15:00	13:00	12:00	12:00	13:00	12:00	17:00
Vol.	7	690	200	6	79	8	4	28	4	4	5	3	1	991
Grand Total	49	7853	2232	78	1009	62	22	287	22	28	25	9	3	11679
Percent	0.4%	67.2%	19.1%	0.7%	8.6%	0.5%	0.2%	2.5%	0.2%	0.2%	0.2%	0.1%	0.0%	

Counts Unlimited, Inc.

City of Menifee
 McCall Boulevard
 B/ Interstate 215 Ramps
 24 Hour Directional Classification Count

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MEN003
 Site Code: 067-21006

Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
01/12/21	0	44	7	0	2	0	0	0	0	0	0	0	0	53
01:00	0	35	8	0	3	1	0	1	0	0	0	0	0	48
02:00	0	31	7	0	2	0	0	0	0	0	0	0	0	40
03:00	0	49	15	0	5	0	0	1	1	0	0	0	0	71
04:00	1	132	41	0	8	0	0	1	2	0	0	0	0	185
05:00	1	219	77	0	28	0	0	4	0	0	0	0	0	329
06:00	4	267	101	0	30	0	1	6	1	1	0	0	0	411
07:00	3	474	135	4	21	2	1	5	2	3	0	0	1	651
08:00	3	519	118	3	32	4	1	12	0	1	0	0	0	693
09:00	4	516	158	1	37	2	1	8	1	5	1	0	0	734
10:00	5	583	164	6	43	1	0	14	3	3	0	1	1	824
11:00	4	553	145	3	37	1	1	11	0	2	0	1	0	758
12 PM	7	675	153	3	46	3	1	16	1	1	0	0	0	906
13:00	6	648	153	3	35	3	0	22	0	2	0	0	0	872
14:00	6	700	160	7	29	1	2	22	3	2	2	3	1	938
15:00	10	679	186	5	53	6	3	26	2	6	3	0	0	979
16:00	4	663	193	6	52	2	1	22	0	1	0	0	0	944
17:00	8	661	167	3	38	3	0	13	1	1	0	0	0	895
18:00	3	518	122	0	26	0	0	11	0	2	0	1	0	683
19:00	0	360	60	2	17	0	0	1	0	0	0	0	0	440
20:00	0	250	62	0	11	0	1	2	1	1	0	0	0	328
21:00	0	176	26	0	1	0	0	1	0	0	0	0	0	204
22:00	0	109	15	0	2	0	0	0	1	0	0	0	0	127
23:00	0	83	10	0	3	0	0	0	0	1	0	0	0	97
Total	69	8944	2283	46	561	29	13	199	19	32	6	6	3	12210
Percent	0.6%	73.3%	18.7%	0.4%	4.6%	0.2%	0.1%	1.6%	0.2%	0.3%	0.0%	0.0%	0.0%	
AM Peak	10:00	10:00	10:00	10:00	10:00	08:00	06:00	10:00	10:00	09:00	09:00	10:00	07:00	10:00
Vol.	5	583	164	6	43	4	1	14	3	5	1	1	1	824
PM Peak	15:00	14:00	16:00	14:00	15:00	15:00	15:00	15:00	14:00	15:00	15:00	14:00	14:00	15:00
Vol.	10	700	193	7	53	6	3	26	3	6	3	3	1	979
Grand Total	69	8944	2283	46	561	29	13	199	19	32	6	6	3	12210
Percent	0.6%	73.3%	18.7%	0.4%	4.6%	0.2%	0.1%	1.6%	0.2%	0.3%	0.0%	0.0%	0.0%	

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Eastbound, Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
01/12/21	0	119	24	0	8	1	0	0	1	0	0	0	0	153
01:00	0	80	18	1	9	1	0	1	0	0	0	0	0	110
02:00	0	73	19	0	9	0	0	0	2	0	0	0	0	103
03:00	0	102	29	0	11	0	0	1	1	0	0	0	0	144
04:00	1	218	78	0	23	0	0	5	2	0	0	0	0	327
05:00	2	372	131	3	67	1	0	8	0	0	0	0	0	584
06:00	5	520	187	6	107	14	1	20	3	1	1	0	0	865
07:00	3	784	218	11	65	5	2	20	5	6	2	0	1	1122
08:00	3	834	223	6	79	5	2	24	1	2	1	0	0	1180
09:00	4	896	286	6	98	4	2	22	4	5	2	0	0	1329
10:00	7	996	270	11	94	3	2	32	4	4	1	1	1	1426
11:00	8	1006	278	9	99	4	3	33	0	6	1	3	1	1451
12 PM	14	1183	311	9	110	11	1	38	1	5	5	0	1	1689
13:00	11	1159	307	6	95	9	0	42	4	2	2	3	0	1640
14:00	10	1264	309	12	95	7	4	46	5	4	4	4	1	1765
15:00	13	1281	386	11	121	9	7	54	2	9	8	0	0	1901
16:00	11	1288	384	11	131	6	3	47	0	5	1	2	1	1890
17:00	15	1351	340	9	115	7	4	38	1	3	3	0	0	1886
18:00	7	1106	257	3	84	4	3	32	2	3	0	2	0	1503
19:00	2	714	150	3	66	0	0	11	0	3	0	0	0	949
20:00	2	562	137	2	42	0	1	8	1	1	0	0	0	756
21:00	0	410	85	1	17	0	0	3	0	0	0	0	0	516
22:00	0	287	57	4	16	0	0	1	2	0	0	0	0	367
23:00	0	192	31	0	9	0	0	0	0	1	0	0	0	233
Total	118	16797	4515	124	1570	91	35	486	41	60	31	15	6	23889
Percent	0.5%	70.3%	18.9%	0.5%	6.6%	0.4%	0.1%	2.0%	0.2%	0.3%	0.1%	0.1%	0.0%	
AM Peak	11:00	11:00	09:00	07:00	06:00	06:00	11:00	11:00	07:00	07:00	07:00	11:00	07:00	11:00
Vol.	8	1006	286	11	107	14	3	33	5	6	2	3	1	1451
PM Peak	17:00	17:00	15:00	14:00	16:00	12:00	15:00	15:00	14:00	15:00	15:00	14:00	12:00	15:00
Vol.	15	1351	386	12	131	11	7	54	5	9	8	4	1	1901
Grand Total	118	16797	4515	124	1570	91	35	486	41	60	31	15	6	23889
Percent	0.5%	70.3%	18.9%	0.5%	6.6%	0.4%	0.1%	2.0%	0.2%	0.3%	0.1%	0.1%	0.0%	

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, January 22, 2019

CITY: Menifee

JOB #: SC2048

LOCATION: McCall between Encanto and I-215 NB Ramp

AM TIME							TOTAL	PM Time							TOTAL
	1	2	3	4	5	6			1	2	3	4	5	6	
0:00	25	0	0	0	0	0	25	12:00	215	14	0	2	0	1	232
0:15	24	0	0	0	0	0	24	12:15	166	9	2	5	0	1	183
0:30	32	1	0	0	0	0	33	12:30	189	6	0	3	0	1	199
0:45	17	0	1	0	0	0	18	12:45	175	11	2	4	0	3	195
1:00	17	0	0	0	0	0	17	13:00	213	10	1	2	0	0	226
1:15	16	0	0	0	0	0	16	13:15	226	9	0	3	0	1	239
1:30	13	0	0	0	0	0	13	13:30	248	15	0	5	0	1	269
1:45	15	1	0	0	0	0	16	13:45	271	11	0	2	0	4	288
2:00	5	0	0	0	0	0	5	14:00	232	17	2	3	0	2	256
2:15	10	0	0	0	0	0	10	14:15	278	10	2	4	0	0	294
2:30	6	1	0	0	0	0	7	14:30	243	9	4	0	0	4	260
2:45	16	0	0	0	0	0	16	14:45	301	14	0	1	0	5	321
3:00	10	0	0	0	0	0	10	15:00	271	10	1	0	1	1	284
3:15	12	0	0	0	0	0	12	15:15	298	13	3	1	0	2	317
3:30	7	1	0	0	0	0	8	15:30	301	11	2	3	0	1	318
3:45	12	0	0	0	0	0	12	15:45	313	8	1	2	0	0	324
4:00	16	1	0	0	0	0	17	16:00	276	11	2	4	0	4	297
4:15	15	1	0	0	0	0	16	16:15	310	7	2	2	0	0	321
4:30	14	2	0	0	0	0	16	16:30	279	14	2	0	0	0	295
4:45	22	1	1	0	0	0	24	16:45	307	14	1	0	0	1	323
5:00	21	2	0	1	0	0	24	17:00	321	9	0	1	0	1	332
5:15	39	1	0	0	0	0	40	17:15	305	14	0	0	0	1	320
5:30	33	0	1	0	0	1	35	17:30	261	10	1	1	0	1	274
5:45	39	2	0	0	0	0	41	17:45	300	14	1	2	0	1	318
6:00	41	2	1	1	1	1	47	18:00	292	10	0	0	0	1	303
6:15	62	3	1	0	0	0	66	18:15	326	4	1	0	0	1	332
6:30	79	13	0	0	0	1	93	18:30	278	4	0	0	0	1	283
6:45	167	4	0	3	0	5	179	18:45	251	5	0	0	0	0	256
7:00	182	12	0	1	0	2	197	19:00	247	0	0	0	0	1	248
7:15	167	10	1	0	0	2	180	19:15	214	7	0	1	0	1	223
7:30	225	10	0	1	0	2	238	19:30	189	8	0	1	0	1	199
7:45	222	7	1	1	0	2	233	19:45	164	4	0	0	0	1	169
8:00	176	13	1	3	0	5	198	20:00	155	0	0	1	0	4	160
8:15	172	5	2	2	0	6	187	20:15	148	2	0	0	0	2	152
8:30	171	9	1	1	0	3	185	20:30	125	6	0	0	0	1	132
8:45	107	6	0	3	0	4	120	20:45	141	1	0	1	0	2	145
9:00	113	15	0	2	0	0	130	21:00	129	1	0	1	0	0	131
9:15	140	12	3	2	0	3	160	21:15	113	0	1	0	0	1	115
9:30	109	10	2	0	0	2	123	21:30	93	1	0	0	0	0	94
9:45	125	5	0	2	0	0	132	21:45	90	0	0	0	0	1	91
10:00	140	13	0	1	0	1	155	22:00	83	0	0	0	0	1	84
10:15	152	4	1	2	0	0	159	22:15	70	1	0	0	0	0	71
10:30	146	6	1	4	0	3	160	22:30	60	1	0	0	0	0	61
10:45	142	12	1	3	1	5	164	22:45	61	1	0	0	0	0	62
11:00	150	13	0	2	0	1	166	23:00	46	1	0	1	0	0	48
11:15	155	13	1	1	0	1	171	23:15	50	0	0	0	0	0	50
11:30	182	6	0	0	0	2	190	23:30	44	1	1	0	0	0	46
11:45	183	8	2	1	0	3	197	23:45	34	1	0	0	0	0	35
TOTAL	3,944	225	22	37	2	55	4,285	TOTAL	9,702	329	32	56	1	55	10,175

AM PEAK HOUR 7:30 AM
AM PEAK VOLUME 856

AM PEAK HOUR 4:15 PM
AM PEAK VOLUME 1,271

CLASS	DESCRIPTION	TOTAL: AM+PM						
		TOTAL	1	2	3	4	5	6
CLASS 1	PASSENGER VEHICLES	13,646	554	54	93	3	110	14,460
CLASS 2	2-AXLE TRUCKS	94.4%	3.8%	0.4%	0.6%	0.0%	0.8%	100.0%
CLASS 3	3-AXLE TRUCKS							
CLASS 4	4 OR MORE AXLE TRUCKS							
CLASS 5	RV	27,364	1,089	118	173	6	226	28,976
CLASS 6	Buses	94.4%	3.8%	0.4%	0.6%	0.0%	0.8%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, January 22, 2019
JOB #: SC2048

CITY: Menifee
LOCATION: McCall between Encanto and I-215 NB Ramp

AM TIME							TOTAL	PM Time							TOTAL
	1	2	3	4	5	6			1	2	3	4	5	6	
0:00	16	0	0	0	0	0	16	12:00	182	5	1	0	0	1	189
0:15	8	0	0	0	0	0	8	12:15	249	19	2	2	0	2	274
0:30	16	0	0	0	0	0	16	12:30	205	8	1	2	0	2	218
0:45	17	0	0	0	0	0	17	12:45	186	8	1	0	0	3	198
1:00	9	0	0	1	0	0	10	13:00	220	11	0	1	0	1	233
1:15	7	0	1	0	0	0	8	13:15	186	10	1	3	0	0	200
1:30	11	0	0	0	0	0	11	13:30	181	8	0	2	0	0	191
1:45	8	0	0	0	0	0	8	13:45	175	9	2	2	0	2	190
2:00	15	0	0	0	0	0	15	14:00	181	9	2	2	1	2	197
2:15	4	0	0	0	0	0	4	14:15	244	10	0	2	0	1	257
2:30	12	0	0	1	0	0	13	14:30	325	11	1	2	0	2	341
2:45	19	1	0	0	0	0	20	14:45	255	5	3	2	0	0	265
3:00	25	0	0	0	0	0	25	15:00	341	12	2	2	0	5	362
3:15	37	1	0	1	0	0	39	15:15	308	11	2	1	0	3	325
3:30	38	2	0	0	0	0	40	15:30	238	11	4	0	0	3	256
3:45	49	3	0	1	0	0	53	15:45	242	10	2	2	0	2	258
4:00	73	1	0	0	0	0	74	16:00	216	7	3	1	0	3	230
4:15	92	4	0	0	0	0	96	16:15	204	8	0	1	0	1	214
4:30	110	3	0	0	0	0	113	16:30	219	8	0	1	0	1	229
4:45	128	6	0	1	0	0	135	16:45	196	5	0	2	0	1	204
5:00	119	4	2	0	0	0	125	17:00	209	8	1	0	0	2	220
5:15	121	0	1	0	0	0	122	17:15	208	5	2	1	0	0	216
5:30	136	6	0	0	1	0	143	17:30	196	6	0	0	0	0	202
5:45	142	9	0	1	0	1	153	17:45	155	8	2	0	0	1	166
6:00	161	6	1	0	0	1	169	18:00	168	5	0	0	0	2	175
6:15	193	8	0	0	0	3	204	18:15	153	3	1	0	0	2	159
6:30	196	10	1	1	0	0	208	18:30	150	4	0	0	0	0	154
6:45	211	7	2	1	0	2	223	18:45	154	1	0	1	0	0	156
7:00	282	15	0	2	0	2	301	19:00	118	6	0	1	0	0	125
7:15	292	13	1	2	0	1	309	19:15	98	0	0	0	0	1	99
7:30	347	7	2	0	1	3	360	19:30	113	1	0	0	0	3	117
7:45	339	17	1	1	0	3	361	19:45	84	6	1	0	0	1	92
8:00	333	11	1	1	0	2	348	20:00	84	0	1	0	0	1	86
8:15	289	5	1	4	0	3	302	20:15	71	0	0	0	0	4	75
8:30	288	11	1	1	0	10	311	20:30	85	1	0	0	0	3	89
8:45	203	15	1	2	0	5	226	20:45	60	0	0	0	0	1	61
9:00	196	14	0	4	0	2	216	21:00	60	2	0	1	0	0	63
9:15	212	7	0	4	0	2	225	21:15	58	0	0	1	0	1	60
9:30	221	16	1	0	0	2	240	21:30	51	0	0	0	0	0	51
9:45	148	10	0	1	0	0	159	21:45	50	0	0	0	0	1	51
10:00	182	11	3	2	0	1	199	22:00	35	2	0	0	0	0	37
10:15	207	7	0	2	0	1	217	22:15	30	2	0	0	0	1	33
10:30	189	9	0	1	0	1	200	22:30	25	1	0	1	0	0	27
10:45	180	10	1	1	0	4	196	22:45	30	1	0	0	0	0	31
11:00	179	9	1	1	0	1	191	23:00	30	1	1	0	0	0	32
11:15	191	10	1	2	0	1	205	23:15	22	0	0	0	0	0	22
11:30	189	8	2	3	0	2	204	23:30	20	1	0	0	0	0	21
11:45	193	9	3	1	0	4	210	23:45	15	1	0	1	0	0	17
TOTAL	6,633	285	28	43	2	57	7,048	TOTAL	7,085	250	36	37	1	59	7,468

AM PEAK HOUR 7:15 AM
AM PEAK VOLUME 1,378

AM PEAK HOUR 2:30 PM
AM PEAK VOLUME 1,293

CLASS 1	PASSENGER VEHICLES	TOTAL: AM+PM	13,718	535	64	80	3	116	14,516
CLASS 2	2-AXLE TRUCKS	% OF TOTAL	94.5%	3.7%	0.4%	0.6%	0.0%	0.8%	100.0%
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV								
CLASS 6	BUS								

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

City of Menifee
Trumble Road
B/ Ethanac Road - McLaughlin Road
24 Hour Directional Classification Count

MEN004
Site Code: 067-21006

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
01/12/21	0	0	1	0	0	0	0	0	0	0	0	0	0	1
01:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	5	2	0	0	0	0	0	0	0	0	0	0	7
05:00	0	8	8	0	0	0	0	0	0	0	0	0	0	16
06:00	0	10	1	0	0	0	0	0	0	0	0	0	0	11
07:00	0	8	3	0	1	0	0	0	0	0	0	0	0	12
08:00	0	6	1	0	2	0	0	0	0	0	0	0	0	9
09:00	0	9	7	0	2	0	0	1	0	0	0	0	0	19
10:00	0	12	2	0	1	0	0	0	0	0	0	0	0	15
11:00	0	7	2	0	1	0	0	0	0	0	0	0	0	10
12 PM	0	9	4	0	0	0	0	1	0	0	0	0	0	14
13:00	0	11	5	0	1	1	0	2	0	0	0	0	0	20
14:00	0	16	6	0	3	0	0	0	0	0	0	0	0	25
15:00	2	7	15	0	1	0	0	0	0	0	0	0	0	25
16:00	0	10	0	0	3	0	0	1	1	0	0	0	0	15
17:00	0	12	8	0	1	0	0	0	0	0	0	0	0	21
18:00	0	8	4	0	0	0	0	0	0	0	0	0	0	12
19:00	0	4	1	0	1	0	0	0	0	0	0	0	0	6
20:00	0	6	1	0	0	0	0	0	0	0	0	0	0	7
21:00	0	5	0	0	1	0	0	0	0	0	0	0	0	6
22:00	0	5	1	0	1	0	0	0	0	0	0	0	0	7
23:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
Total	2	163	73	0	19	1	0	5	1	0	0	0	0	264
Percent	0.8%	61.7%	27.7%	0.0%	7.2%	0.4%	0.0%	1.9%	0.4%	0.0%	0.0%	0.0%	0.0%	
AM Peak		10:00	05:00		08:00			09:00						09:00
Vol.		12	8		2			1						19
PM Peak	15:00	14:00	15:00		14:00	13:00		13:00	16:00					14:00
Vol.	2	16	15		3	1		2	1					25
Grand Total	2	163	73	0	19	1	0	5	1	0	0	0	0	264
Percent	0.8%	61.7%	27.7%	0.0%	7.2%	0.4%	0.0%	1.9%	0.4%	0.0%	0.0%	0.0%	0.0%	

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City of Menifee
Trumble Road
B/ Ethanac Road - McLaughlin Road
24 Hour Directional Classification Count

MEN004
Site Code: 067-21006

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
01/12/21	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
03:00	0	0	3	0	0	0	0	0	0	0	0	0	0	3
04:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
05:00	0	4	1	0	0	0	0	0	0	0	0	0	0	5
06:00	0	5	3	0	4	0	0	0	0	0	0	0	0	12
07:00	0	3	4	0	0	0	0	0	0	0	0	0	0	7
08:00	0	3	5	0	0	0	0	1	0	0	0	0	0	9
09:00	0	4	1	0	2	0	0	0	0	0	0	0	0	7
10:00	0	9	1	0	4	0	0	0	0	0	0	0	0	14
11:00	0	6	5	0	2	0	0	2	0	0	0	0	0	15
12 PM	0	10	3	0	3	0	0	1	0	0	0	0	0	17
13:00	1	10	5	0	5	0	0	2	0	0	0	0	0	23
14:00	1	11	5	0	3	0	0	0	0	0	0	0	0	20
15:00	1	11	6	0	4	0	0	0	0	0	0	0	0	22
16:00	0	9	7	0	6	0	0	1	1	0	0	0	0	24
17:00	0	10	9	1	5	0	0	0	0	0	0	0	0	25
18:00	0	8	6	0	5	0	0	0	0	0	0	0	0	19
19:00	0	8	3	0	1	0	0	0	0	0	0	0	0	12
20:00	0	7	2	0	1	0	0	0	0	0	0	0	0	10
21:00	0	2	3	0	1	0	0	0	0	0	0	0	0	6
22:00	0	3	1	0	1	0	0	0	0	0	0	0	0	5
23:00	0	4	1	0	0	0	0	0	0	0	0	0	0	5
Total	3	132	75	1	47	0	0	7	1	0	0	0	0	266
Percent	1.1%	49.6%	28.2%	0.4%	17.7%	0.0%	0.0%	2.6%	0.4%	0.0%	0.0%	0.0%	0.0%	
AM Peak		10:00	08:00		06:00			11:00						11:00
Vol.		9	5		4			2						15
PM Peak	13:00	14:00	17:00	17:00	16:00			13:00	16:00					17:00
Vol.	1	11	9	1	6			2	1					25
Grand Total	3	132	75	1	47	0	0	7	1	0	0	0	0	266
Percent	1.1%	49.6%	28.2%	0.4%	17.7%	0.0%	0.0%	2.6%	0.4%	0.0%	0.0%	0.0%	0.0%	

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City of Menifee
Trumble Road
B/ Ethanac Road - McLaughlin Road
24 Hour Directional Classification Count

MEN004
Site Code: 067-21006

Northbound, Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
01/12/21	0	0	1	0	0	0	0	0	0	0	0	0	0	1
01:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
02:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
03:00	0	1	3	0	0	0	0	0	0	0	0	0	0	4
04:00	0	7	2	0	0	0	0	0	0	0	0	0	0	9
05:00	0	12	9	0	0	0	0	0	0	0	0	0	0	21
06:00	0	15	4	0	4	0	0	0	0	0	0	0	0	23
07:00	0	11	7	0	1	0	0	0	0	0	0	0	0	19
08:00	0	9	6	0	2	0	0	1	0	0	0	0	0	18
09:00	0	13	8	0	4	0	0	1	0	0	0	0	0	26
10:00	0	21	3	0	5	0	0	0	0	0	0	0	0	29
11:00	0	13	7	0	3	0	0	2	0	0	0	0	0	25
12 PM	0	19	7	0	3	0	0	2	0	0	0	0	0	31
13:00	1	21	10	0	6	1	0	4	0	0	0	0	0	43
14:00	1	27	11	0	6	0	0	0	0	0	0	0	0	45
15:00	3	18	21	0	5	0	0	0	0	0	0	0	0	47
16:00	0	19	7	0	9	0	0	2	2	0	0	0	0	39
17:00	0	22	17	1	6	0	0	0	0	0	0	0	0	46
18:00	0	16	10	0	5	0	0	0	0	0	0	0	0	31
19:00	0	12	4	0	2	0	0	0	0	0	0	0	0	18
20:00	0	13	3	0	1	0	0	0	0	0	0	0	0	17
21:00	0	7	3	0	2	0	0	0	0	0	0	0	0	12
22:00	0	8	2	0	2	0	0	0	0	0	0	0	0	12
23:00	0	7	1	0	0	0	0	0	0	0	0	0	0	8
Total	5	295	148	1	66	1	0	12	2	0	0	0	0	530
Percent	0.9%	55.7%	27.9%	0.2%	12.5%	0.2%	0.0%	2.3%	0.4%	0.0%	0.0%	0.0%	0.0%	
AM Peak		10:00	05:00		10:00			11:00						10:00
Vol.		21	9		5			2						29
PM Peak	15:00	14:00	15:00	17:00	16:00	13:00		13:00	16:00					15:00
Vol.	3	27	21	1	9	1		4	2					47
Grand Total	5	295	148	1	66	1	0	12	2	0	0	0	0	530
Percent	0.9%	55.7%	27.9%	0.2%	12.5%	0.2%	0.0%	2.3%	0.4%	0.0%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

City of Menifee
 Dawson Road
 B/ Ethanac Road - McLaughlin Road
 24 Hour Directional Classification Count

PO Box 1178
 Corona, CA 92878
 Phone: (951) 268-6268
 email: counts@countsunlimited.com

MEN005
 Site Code: 067-21006

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
01/12/21	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	2	0	0	0	0	1	0	0	0	0	0	3
07:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	1	0	0	2	0	0	0	0	0	0	0	0	3
10:00	0	0	1	0	0	0	0	1	0	0	0	0	0	2
11:00	0	0	2	0	0	0	0	0	0	0	0	0	0	2
12 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
13:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
14:00	0	4	1	0	0	1	0	0	0	0	0	0	0	6
15:00	0	1	6	0	0	0	0	0	0	0	0	0	0	7
16:00	0	0	2	0	1	0	0	0	0	0	0	0	0	3
17:00	0	0	2	0	2	0	0	0	0	0	0	0	0	4
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	9	20	0	5	1	0	2	0	0	0	0	0	37
Percent	0.0%	24.3%	54.1%	0.0%	13.5%	2.7%	0.0%	5.4%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		04:00	06:00		09:00			06:00						06:00
Vol.		1	2		2			1						3
PM Peak		14:00	15:00		17:00	14:00								15:00
Vol.		4	6		2	1								7
Grand Total	0	9	20	0	5	1	0	2	0	0	0	0	0	37
Percent	0.0%	24.3%	54.1%	0.0%	13.5%	2.7%	0.0%	5.4%	0.0%	0.0%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

City of Menifee
 Dawson Road
 B/ Ethanac Road - McLaughlin Road
 24 Hour Directional Classification Count

PO Box 1178
 Corona, CA 92878
 Phone: (951) 268-6268
 email: counts@countsunlimited.com

MEN005
 Site Code: 067-21006

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
01/12/21	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	1	2	2	0	0	0	0	0	0	0	0	0	0	5
06:00	0	1	1	0	0	0	0	0	1	0	0	0	0	3
07:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	1	0	0	1	0	0	0	0	0	0	0	0	2
10:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
11:00	0	0	1	0	1	0	0	0	0	0	0	0	0	2
12 PM	0	0	0	0	2	0	0	0	0	0	0	0	0	2
13:00	0	1	1	0	1	0	0	0	0	0	0	0	0	3
14:00	0	1	3	0	1	0	0	1	0	0	0	0	0	6
15:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	8	9	0	8	0	0	1	1	0	0	0	0	28
Percent	3.6%	28.6%	32.1%	0.0%	28.6%	0.0%	0.0%	3.6%	3.6%	0.0%	0.0%	0.0%	0.0%	
AM Peak	05:00	05:00	05:00		09:00				06:00					05:00
Vol.	1	2	2		1				1					5
PM Peak		13:00	14:00		12:00			14:00						14:00
Vol.		1	3		2			1						6
Grand Total	1	8	9	0	8	0	0	1	1	0	0	0	0	28
Percent	3.6%	28.6%	32.1%	0.0%	28.6%	0.0%	0.0%	3.6%	3.6%	0.0%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

City of Menifee
 Dawson Road
 B/ Ethanac Road - McLaughlin Road
 24 Hour Directional Classification Count

PO Box 1178
 Corona, CA 92878
 Phone: (951) 268-6268
 email: counts@countsunlimited.com

MEN005
 Site Code: 067-21006

Northbound, Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
01/12/21	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
05:00	1	2	2	0	0	0	0	0	0	0	0	0	0	5
06:00	0	1	3	0	0	0	0	1	1	0	0	0	0	6
07:00	0	0	2	0	0	0	0	0	0	0	0	0	0	2
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	2	0	0	3	0	0	0	0	0	0	0	0	5
10:00	0	1	1	0	0	0	0	1	0	0	0	0	0	3
11:00	0	0	3	0	1	0	0	0	0	0	0	0	0	4
12 PM	0	1	0	0	2	0	0	0	0	0	0	0	0	3
13:00	0	2	2	0	1	0	0	0	0	0	0	0	0	5
14:00	0	5	4	0	1	1	0	1	0	0	0	0	0	12
15:00	0	1	6	0	1	0	0	0	0	0	0	0	0	8
16:00	0	0	2	0	1	0	0	0	0	0	0	0	0	3
17:00	0	0	2	0	3	0	0	0	0	0	0	0	0	5
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	1	17	29	0	13	1	0	3	1	0	0	0	0	65
Percent	1.5%	26.2%	44.6%	0.0%	20.0%	1.5%	0.0%	4.6%	1.5%	0.0%	0.0%	0.0%	0.0%	
AM Peak	05:00	05:00	06:00		09:00			06:00	06:00					06:00
Vol.	1	2	3		3			1	1					6
PM Peak		14:00	15:00		17:00	14:00		14:00						14:00
Vol.		5	6		3	1		1						12
Grand Total	1	17	29	0	13	1	0	3	1	0	0	0	0	65
Percent	1.5%	26.2%	44.6%	0.0%	20.0%	1.5%	0.0%	4.6%	1.5%	0.0%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

City of Menifee
 Encanto Drive
 B/ McLaughlin Road - Rouse Road
 24 Hour Directional Classification Count

PO Box 1178
 Corona, CA 92878
 Phone: (951) 268-6268
 email: counts@countsunlimited.com

MEN006
 Site Code: 067-21006

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
01/12/21	0	7	3	0	0	0	0	0	0	0	0	0	0	10
01:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
02:00	0	3	1	0	1	0	0	0	0	0	0	0	0	5
03:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
04:00	0	11	2	0	2	0	0	0	0	0	0	0	0	15
05:00	2	15	12	0	1	0	0	0	0	0	0	0	0	30
06:00	0	28	6	0	0	1	0	1	1	0	0	0	0	37
07:00	1	33	10	1	2	3	1	1	0	0	0	0	0	52
08:00	2	31	16	1	8	7	0	1	1	0	0	0	0	67
09:00	0	39	16	0	1	7	0	3	0	0	0	0	0	66
10:00	0	53	14	0	14	5	0	1	2	0	0	0	0	89
11:00	1	73	15	1	6	1	0	1	1	0	0	0	0	99
12 PM	0	96	27	0	4	2	0	1	0	0	0	0	0	130
13:00	0	68	24	0	7	4	0	2	1	0	0	0	0	106
14:00	0	63	12	0	4	0	0	0	1	0	0	0	0	80
15:00	2	89	28	1	4	0	0	2	1	0	0	0	0	127
16:00	1	106	26	0	11	2	0	0	0	0	0	0	0	146
17:00	0	63	10	0	4	0	0	1	0	0	0	0	0	78
18:00	0	59	15	0	4	1	0	1	0	0	0	0	0	80
19:00	0	36	9	0	0	0	0	1	0	0	0	0	0	46
20:00	0	34	4	0	0	1	0	0	0	0	0	0	0	39
21:00	0	20	3	0	1	0	0	0	0	0	0	0	0	24
22:00	0	19	2	0	0	0	0	1	0	0	0	0	0	22
23:00	0	11	2	0	0	0	0	0	0	0	0	0	0	13
Total	9	967	257	4	74	34	1	17	8	0	0	0	0	1371
Percent	0.7%	70.5%	18.7%	0.3%	5.4%	2.5%	0.1%	1.2%	0.6%	0.0%	0.0%	0.0%	0.0%	
AM Peak	05:00	11:00	08:00	07:00	10:00	08:00	07:00	09:00	10:00					11:00
Vol.	2	73	16	1	14	7	1	3	2					99
PM Peak	15:00	16:00	15:00	15:00	16:00	13:00		13:00	13:00					16:00
Vol.	2	106	28	1	11	4		2	1					146
Grand Total	9	967	257	4	74	34	1	17	8	0	0	0	0	1371
Percent	0.7%	70.5%	18.7%	0.3%	5.4%	2.5%	0.1%	1.2%	0.6%	0.0%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

City of Menifee
 Encanto Drive
 B/ McLaughlin Road - Rouse Road
 24 Hour Directional Classification Count

PO Box 1178
 Corona, CA 92878
 Phone: (951) 268-6268
 email: counts@countsunlimited.com

MEN006
 Site Code: 067-21006

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
01/12/21	0	6	2	0	0	0	0	0	0	0	0	0	0	8
01:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
02:00	0	4	2	0	0	0	0	0	0	0	0	0	0	6
03:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
04:00	0	11	1	0	0	0	0	0	0	0	0	0	0	12
05:00	0	7	2	0	0	0	0	0	0	0	0	0	0	9
06:00	0	19	4	1	1	0	0	4	0	0	0	0	0	29
07:00	0	29	10	0	3	0	0	5	0	0	0	0	0	47
08:00	1	34	13	0	4	0	0	5	0	0	0	0	0	57
09:00	0	32	14	0	6	1	0	5	1	0	0	0	0	59
10:00	1	40	17	0	6	2	0	1	0	0	0	0	0	67
11:00	1	61	23	1	4	0	0	1	0	0	0	0	0	91
12 PM	1	66	24	1	6	0	0	4	0	0	0	0	0	102
13:00	1	71	10	0	9	0	0	2	0	0	0	0	0	93
14:00	0	49	25	0	10	0	0	2	0	0	0	0	0	86
15:00	2	82	29	0	8	1	0	1	0	0	0	0	0	123
16:00	2	111	32	0	2	2	0	3	0	0	0	0	0	152
17:00	0	91	21	0	8	0	0	0	0	0	0	0	0	120
18:00	0	50	17	0	3	0	0	1	0	0	0	0	0	71
19:00	0	40	11	1	3	0	0	1	0	0	0	0	0	56
20:00	0	37	11	0	1	0	0	1	0	0	0	0	0	50
21:00	0	21	1	1	1	0	0	0	0	0	0	0	0	24
22:00	1	13	1	0	0	0	0	0	0	0	0	0	0	15
23:00	0	7	1	0	0	0	0	0	0	0	0	0	0	8
Total	10	890	272	5	75	6	0	36	1	0	0	0	0	1295
Percent	0.8%	68.7%	21.0%	0.4%	5.8%	0.5%	0.0%	2.8%	0.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak	08:00	11:00	11:00	06:00	09:00	10:00		07:00	09:00					11:00
Vol.	1	61	23	1	6	2		5	1					91
PM Peak	15:00	16:00	16:00	12:00	14:00	16:00		12:00						16:00
Vol.	2	111	32	1	10	2		4						152
Grand Total	10	890	272	5	75	6	0	36	1	0	0	0	0	1295
Percent	0.8%	68.7%	21.0%	0.4%	5.8%	0.5%	0.0%	2.8%	0.1%	0.0%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

City of Menifee
 Encanto Drive
 B/ McLaughlin Road - Rouse Road
 24 Hour Directional Classification Count

PO Box 1178
 Corona, CA 92878
 Phone: (951) 268-6268
 email: counts@countsunlimited.com

MEN006
 Site Code: 067-21006

Northbound, Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
01/12/21	0	13	5	0	0	0	0	0	0	0	0	0	0	18
01:00	0	12	0	0	0	0	0	0	0	0	0	0	0	12
02:00	0	7	3	0	1	0	0	0	0	0	0	0	0	11
03:00	0	7	1	0	0	0	0	0	0	0	0	0	0	8
04:00	0	22	3	0	2	0	0	0	0	0	0	0	0	27
05:00	2	22	14	0	1	0	0	0	0	0	0	0	0	39
06:00	0	47	10	1	1	1	0	5	1	0	0	0	0	66
07:00	1	62	20	1	5	3	1	6	0	0	0	0	0	99
08:00	3	65	29	1	12	7	0	6	1	0	0	0	0	124
09:00	0	71	30	0	7	8	0	8	1	0	0	0	0	125
10:00	1	93	31	0	20	7	0	2	2	0	0	0	0	156
11:00	2	134	38	2	10	1	0	2	1	0	0	0	0	190
12 PM	1	162	51	1	10	2	0	5	0	0	0	0	0	232
13:00	1	139	34	0	16	4	0	4	1	0	0	0	0	199
14:00	0	112	37	0	14	0	0	2	1	0	0	0	0	166
15:00	4	171	57	1	12	1	0	3	1	0	0	0	0	250
16:00	3	217	58	0	13	4	0	3	0	0	0	0	0	298
17:00	0	154	31	0	12	0	0	1	0	0	0	0	0	198
18:00	0	109	32	0	7	1	0	2	0	0	0	0	0	151
19:00	0	76	20	1	3	0	0	2	0	0	0	0	0	102
20:00	0	71	15	0	1	1	0	1	0	0	0	0	0	89
21:00	0	41	4	1	2	0	0	0	0	0	0	0	0	48
22:00	1	32	3	0	0	0	0	1	0	0	0	0	0	37
23:00	0	18	3	0	0	0	0	0	0	0	0	0	0	21
Total	19	1857	529	9	149	40	1	53	9	0	0	0	0	2666
Percent	0.7%	69.7%	19.8%	0.3%	5.6%	1.5%	0.0%	2.0%	0.3%	0.0%	0.0%	0.0%	0.0%	
AM Peak	08:00	11:00	11:00	11:00	10:00	09:00	07:00	09:00	10:00					11:00
Vol.	3	134	38	2	20	8	1	8	2					190
PM Peak	15:00	16:00	16:00	12:00	13:00	13:00		12:00	13:00					16:00
Vol.	4	217	58	1	16	4		5	1					298
Grand Total	19	1857	529	9	149	40	1	53	9	0	0	0	0	2666
Percent	0.7%	69.7%	19.8%	0.3%	5.6%	1.5%	0.0%	2.0%	0.3%	0.0%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

City of Menifee
 Encanto Drive
 B/ Rouse Road - McCall Boulevard
 24 Hour Directional Classification Count

PO Box 1178
 Corona, CA 92878
 Phone: (951) 268-6268
 email: counts@countsunlimited.com

MEN007
 Site Code: 067-21006

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
01/12/21	0	9	2	0	0	0	0	0	0	0	0	0	0	11
01:00	0	9	3	0	0	0	0	0	0	0	0	0	0	12
02:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
03:00	0	5	0	0	1	0	0	0	0	0	0	0	0	6
04:00	0	12	2	0	1	0	0	0	0	0	0	0	0	15
05:00	0	8	6	0	3	0	0	0	0	0	0	0	0	17
06:00	0	23	6	0	4	0	0	1	0	0	0	0	0	34
07:00	0	34	14	1	8	3	0	0	0	0	0	0	0	60
08:00	0	56	26	3	21	5	0	2	0	0	0	0	0	113
09:00	0	47	22	0	12	5	1	4	0	0	0	0	0	91
10:00	0	91	25	0	20	4	0	2	0	0	0	0	0	142
11:00	3	103	39	2	18	1	0	3	0	0	0	0	0	169
12 PM	0	92	39	0	11	1	0	3	0	0	0	0	0	146
13:00	0	99	34	1	21	3	0	1	1	0	0	0	0	160
14:00	0	124	39	2	15	0	0	3	1	0	0	0	0	184
15:00	1	139	55	0	21	0	0	2	0	0	0	0	0	218
16:00	3	130	50	1	17	1	0	0	0	0	0	0	0	202
17:00	3	126	24	0	10	0	0	1	0	0	0	0	0	164
18:00	0	84	31	0	4	0	0	0	0	0	0	0	0	119
19:00	0	46	15	0	4	0	0	0	0	0	0	0	0	65
20:00	0	50	10	0	5	0	0	0	0	0	0	0	0	65
21:00	1	27	10	0	2	0	0	0	0	0	0	0	0	40
22:00	0	33	10	0	2	0	0	1	0	0	0	0	0	46
23:00	0	22	3	0	1	0	0	0	0	0	0	0	0	26
Total	11	1374	465	10	201	23	1	23	2	0	0	0	0	2110
Percent	0.5%	65.1%	22.0%	0.5%	9.5%	1.1%	0.0%	1.1%	0.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	11:00	11:00	08:00	08:00	08:00	09:00	09:00						11:00
Vol.	3	103	39	3	21	5	1	4						169
PM Peak	16:00	15:00	15:00	14:00	13:00	13:00		12:00	13:00					15:00
Vol.	3	139	55	2	21	3		3	1					218
Grand Total	11	1374	465	10	201	23	1	23	2	0	0	0	0	2110
Percent	0.5%	65.1%	22.0%	0.5%	9.5%	1.1%	0.0%	1.1%	0.1%	0.0%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

City of Menifee
 Encanto Drive
 B/ Rouse Road - McCall Boulevard
 24 Hour Directional Classification Count

PO Box 1178
 Corona, CA 92878
 Phone: (951) 268-6268
 email: counts@countsunlimited.com

MEN007
 Site Code: 067-21006

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
01/12/21	0	8	2	0	0	0	0	0	0	0	0	0	0	10
01:00	0	10	1	0	1	0	0	0	0	0	0	0	0	12
02:00	0	9	0	0	0	0	0	0	0	0	0	0	0	9
03:00	0	5	0	0	2	0	0	0	0	0	0	0	0	7
04:00	0	17	2	0	3	0	0	0	0	0	0	0	0	22
05:00	1	23	3	0	1	0	0	0	0	0	0	0	0	28
06:00	0	26	13	0	2	0	0	3	0	0	0	0	0	44
07:00	0	48	16	1	4	0	0	4	0	0	0	0	0	73
08:00	0	65	22	1	4	0	0	5	0	0	0	0	0	97
09:00	0	54	29	1	11	1	0	6	0	0	0	0	0	102
10:00	0	75	23	0	5	0	0	2	0	0	0	0	0	105
11:00	1	89	33	1	8	0	0	2	0	0	0	0	0	134
12 PM	1	91	30	0	14	1	0	2	0	0	0	0	0	139
13:00	0	119	32	0	7	0	0	2	0	0	0	0	0	160
14:00	1	118	28	1	15	0	0	4	0	0	0	0	0	167
15:00	2	133	40	0	13	0	0	2	0	0	0	0	0	190
16:00	0	125	47	1	10	0	0	1	0	0	0	0	0	184
17:00	0	119	28	0	7	0	0	1	0	0	0	0	0	155
18:00	0	75	17	0	3	0	0	1	0	0	0	0	0	96
19:00	0	51	15	0	3	0	0	0	0	0	0	0	0	69
20:00	0	59	15	0	3	0	0	0	0	0	0	0	0	77
21:00	0	36	5	0	0	0	0	0	0	0	0	0	0	41
22:00	1	20	4	0	0	0	0	0	0	0	0	0	0	25
23:00	1	17	3	0	0	0	0	0	0	0	0	0	0	21
Total	8	1392	408	6	116	2	0	35	0	0	0	0	0	1967
Percent	0.4%	70.8%	20.7%	0.3%	5.9%	0.1%	0.0%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	05:00	11:00	11:00	07:00	09:00	09:00		09:00						11:00
Vol.	1	89	33	1	11	1		6						134
PM Peak	15:00	15:00	16:00	14:00	14:00	12:00		14:00						15:00
Vol.	2	133	47	1	15	1		4						190
Grand Total	8	1392	408	6	116	2	0	35	0	0	0	0	0	1967
Percent	0.4%	70.8%	20.7%	0.3%	5.9%	0.1%	0.0%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

City of Menifee
 Encanto Drive
 B/ Rouse Road - McCall Boulevard
 24 Hour Directional Classification Count

PO Box 1178
 Corona, CA 92878
 Phone: (951) 268-6268
 email: counts@countsunlimited.com

MEN007
 Site Code: 067-21006

Northbound, Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
01/12/21	0	17	4	0	0	0	0	0	0	0	0	0	0	21
01:00	0	19	4	0	1	0	0	0	0	0	0	0	0	24
02:00	0	14	0	0	0	0	0	0	0	0	0	0	0	14
03:00	0	10	0	0	3	0	0	0	0	0	0	0	0	13
04:00	0	29	4	0	4	0	0	0	0	0	0	0	0	37
05:00	1	31	9	0	4	0	0	0	0	0	0	0	0	45
06:00	0	49	19	0	6	0	0	4	0	0	0	0	0	78
07:00	0	82	30	2	12	3	0	4	0	0	0	0	0	133
08:00	0	121	48	4	25	5	0	7	0	0	0	0	0	210
09:00	0	101	51	1	23	6	1	10	0	0	0	0	0	193
10:00	0	166	48	0	25	4	0	4	0	0	0	0	0	247
11:00	4	192	72	3	26	1	0	5	0	0	0	0	0	303
12 PM	1	183	69	0	25	2	0	5	0	0	0	0	0	285
13:00	0	218	66	1	28	3	0	3	1	0	0	0	0	320
14:00	1	242	67	3	30	0	0	7	1	0	0	0	0	351
15:00	3	272	95	0	34	0	0	4	0	0	0	0	0	408
16:00	3	255	97	2	27	1	0	1	0	0	0	0	0	386
17:00	3	245	52	0	17	0	0	2	0	0	0	0	0	319
18:00	0	159	48	0	7	0	0	1	0	0	0	0	0	215
19:00	0	97	30	0	7	0	0	0	0	0	0	0	0	134
20:00	0	109	25	0	8	0	0	0	0	0	0	0	0	142
21:00	1	63	15	0	2	0	0	0	0	0	0	0	0	81
22:00	1	53	14	0	2	0	0	1	0	0	0	0	0	71
23:00	1	39	6	0	1	0	0	0	0	0	0	0	0	47
Total	19	2766	873	16	317	25	1	58	2	0	0	0	0	4077
Percent	0.5%	67.8%	21.4%	0.4%	7.8%	0.6%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	11:00	11:00	08:00	11:00	09:00	09:00	09:00						11:00
Vol.	4	192	72	4	26	6	1	10						303
PM Peak	15:00	15:00	16:00	14:00	15:00	13:00		14:00	13:00					15:00
Vol.	3	272	97	3	34	3		7	1					408
Grand Total	19	2766	873	16	317	25	1	58	2	0	0	0	0	4077
Percent	0.5%	67.8%	21.4%	0.4%	7.8%	0.6%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

City of Menifee
 McLaughlin Road
 B/ Encanto Drive - Trumble Road
 24 Hour Directional Classification Count

PO Box 1178
 Corona, CA 92878
 Phone: (951) 268-6268
 email: counts@countsunlimited.com

MEN001
 Site Code: 067-21006

Eastbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
01/12/21	0	2	1	0	0	0	0	0	0	0	0	0	0	3
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
05:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
06:00	0	2	3	0	0	0	0	0	0	0	0	0	0	5
07:00	0	3	0	0	2	0	0	0	0	0	0	0	0	5
08:00	0	7	1	0	1	0	0	0	0	0	0	0	0	9
09:00	0	9	1	0	1	0	0	1	0	0	0	0	0	12
10:00	0	6	2	0	1	0	0	0	0	0	0	0	0	9
11:00	0	17	4	0	3	0	0	0	0	0	0	0	0	24
12 PM	0	14	3	0	1	0	0	0	0	0	0	0	0	18
13:00	0	18	4	0	1	0	0	2	0	0	0	0	0	25
14:00	0	15	6	0	0	0	0	1	0	0	0	0	0	22
15:00	1	18	9	0	1	0	0	0	0	0	0	0	0	29
16:00	0	23	10	0	3	0	0	1	0	0	0	0	0	37
17:00	0	19	13	0	6	0	0	0	0	0	0	0	0	38
18:00	0	13	4	0	0	0	0	0	0	0	0	0	0	17
19:00	1	9	8	0	1	0	0	0	0	0	0	0	0	19
20:00	0	6	1	0	2	0	0	0	0	0	0	0	0	9
21:00	0	6	0	0	1	0	0	0	0	0	0	0	0	7
22:00	0	9	0	0	0	0	0	0	0	0	0	0	0	9
23:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
Total	2	206	70	0	24	0	0	5	0	0	0	0	0	307
Percent	0.7%	67.1%	22.8%	0.0%	7.8%	0.0%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		11:00	11:00		11:00			09:00						11:00
Vol.		17	4		3			1						24
PM Peak	15:00	16:00	17:00		17:00			13:00						17:00
Vol.	1	23	13		6			2						38
Grand Total	2	206	70	0	24	0	0	5	0	0	0	0	0	307
Percent	0.7%	67.1%	22.8%	0.0%	7.8%	0.0%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

City of Menifee
 McLaughlin Road
 B/ Encanto Drive - Trumble Road
 24 Hour Directional Classification Count

PO Box 1178
 Corona, CA 92878
 Phone: (951) 268-6268
 email: counts@countsunlimited.com

MEN001
 Site Code: 067-21006

Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
01/12/21	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	1	0	0	1	0	0	0	0	0	0	0	0	2
02:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	2	1	0	1	0	0	0	0	0	0	0	0	4
04:00	0	6	5	0	1	0	0	0	0	0	0	0	0	12
05:00	0	11	3	0	4	0	0	0	0	0	0	0	0	18
06:00	0	10	5	0	1	0	0	0	0	0	0	0	0	16
07:00	0	12	6	0	3	0	0	0	0	0	0	0	0	21
08:00	0	8	8	0	2	0	0	1	0	0	0	0	0	19
09:00	0	14	3	0	3	0	0	1	0	0	0	0	0	21
10:00	0	5	4	0	3	0	0	0	0	0	0	0	0	12
11:00	0	13	5	0	4	0	0	1	0	0	0	0	0	23
12 PM	0	13	7	0	4	0	0	0	0	0	0	0	0	24
13:00	0	12	6	0	0	0	0	2	0	0	0	0	0	20
14:00	0	11	3	0	4	0	0	0	0	0	0	0	0	18
15:00	0	14	2	0	2	0	0	0	0	0	0	0	0	18
16:00	0	11	5	0	1	0	0	0	0	0	0	0	0	17
17:00	1	6	10	0	7	0	0	0	0	0	0	0	0	24
18:00	0	7	4	0	0	0	0	0	0	0	0	0	0	11
19:00	0	6	1	0	1	0	0	0	0	0	0	0	0	8
20:00	0	5	0	0	1	0	0	0	0	0	0	0	0	6
21:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
22:00	0	3	3	0	0	0	0	0	0	0	0	0	0	6
23:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
Total	1	180	81	0	43	0	0	5	0	0	0	0	0	310
Percent	0.3%	58.1%	26.1%	0.0%	13.9%	0.0%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		09:00	08:00		05:00			08:00						11:00
Vol.		14	8		4			1						23
PM Peak	17:00	15:00	17:00		17:00			13:00						12:00
Vol.	1	14	10		7			2						24
Grand Total	1	180	81	0	43	0	0	5	0	0	0	0	0	310
Percent	0.3%	58.1%	26.1%	0.0%	13.9%	0.0%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

City of Menifee
 McLaughlin Road
 B/ Encanto Drive - Trumble Road
 24 Hour Directional Classification Count

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MEN001
 Site Code: 067-21006

Eastbound, Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
01/12/21	0	3	1	0	0	0	0	0	0	0	0	0	0	4
01:00	0	2	0	0	1	0	0	0	0	0	0	0	0	3
02:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	4	1	0	1	0	0	0	0	0	0	0	0	6
04:00	0	7	5	0	1	0	0	0	0	0	0	0	0	13
05:00	0	13	3	0	4	0	0	0	0	0	0	0	0	20
06:00	0	12	8	0	1	0	0	0	0	0	0	0	0	21
07:00	0	15	6	0	5	0	0	0	0	0	0	0	0	26
08:00	0	15	9	0	3	0	0	1	0	0	0	0	0	28
09:00	0	23	4	0	4	0	0	2	0	0	0	0	0	33
10:00	0	11	6	0	4	0	0	0	0	0	0	0	0	21
11:00	0	30	9	0	7	0	0	1	0	0	0	0	0	47
12 PM	0	27	10	0	5	0	0	0	0	0	0	0	0	42
13:00	0	30	10	0	1	0	0	4	0	0	0	0	0	45
14:00	0	26	9	0	4	0	0	1	0	0	0	0	0	40
15:00	1	32	11	0	3	0	0	0	0	0	0	0	0	47
16:00	0	34	15	0	4	0	0	1	0	0	0	0	0	54
17:00	1	25	23	0	13	0	0	0	0	0	0	0	0	62
18:00	0	20	8	0	0	0	0	0	0	0	0	0	0	28
19:00	1	15	9	0	2	0	0	0	0	0	0	0	0	27
20:00	0	11	1	0	3	0	0	0	0	0	0	0	0	15
21:00	0	10	0	0	1	0	0	0	0	0	0	0	0	11
22:00	0	12	3	0	0	0	0	0	0	0	0	0	0	15
23:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
Total	3	386	151	0	67	0	0	10	0	0	0	0	0	617
Percent	0.5%	62.6%	24.5%	0.0%	10.9%	0.0%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		11:00	08:00		11:00			09:00						11:00
Vol.		30	9		7			2						47
PM Peak	15:00	16:00	17:00		17:00			13:00						17:00
Vol.	1	34	23		13			4						62
Grand Total	3	386	151	0	67	0	0	10	0	0	0	0	0	617
Percent	0.5%	62.6%	24.5%	0.0%	10.9%	0.0%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	

Appendix D

Level of Service Analysis Worksheets

Appendix D-1
Existing Conditions Analysis (2021)

Menifee Commerce Center

Vistro File: H:\...19-239 Menifee Commerce Center
100k.vistro

Scenario 1 Existing AM (2021)

Report File: H:\...LOS - 1 Existing AM.pdf

2021-08-12

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Case Rd/Bonnie Dr @ I-215 SB	Signalized	HCM 6th Edition	SB Thru	0.979	60.4	E
2	SR-74 @ I-215 NB	Signalized	HCM 6th Edition	SEB Left	0.780	14.8	B
3	SR-74 @ Trumble Rd	Signalized	HCM 6th Edition	NWB Right	0.821	30.1	C
4	SR-74 @ Sherman Rd	Signalized	HCM 6th Edition	SEB Left	0.665	17.5	B
5	Ethanac Rd @ Murrieta Rd	Signalized	HCM 6th Edition	EB Left	0.656	22.7	C
6	Ethanac Rd @ Case Rd/Barnett Rd	Signalized	HCM 6th Edition	NB Right	0.651	18.9	B
7	Ethanac Rd @ I-215 SB	Signalized	HCM 6th Edition	WB Left	0.628	15.6	B
8	Ethanac Rd @ I-215 NB	Signalized	HCM 6th Edition	WB Thru	0.799	27.9	C
9	Ethanac Rd @ Encanto Dr	Two-way stop	HCM 6th Edition	NB Left	0.636	70.1	F
10	Ethanac Rd @ Trumble Rd	Signalized	HCM 6th Edition	NB Left	0.635	17.5	B
11	Ethanac Rd @ Sherman Rd	Two-way stop	HCM 6th Edition	NB Left	0.056	35.4	E
12	Ethanac Rd @ Dawson Rd	Two-way stop	HCM 6th Edition	NB Right	0.003	10.7	B
13	Ethanac Rd @ Antelope Rd	Two-way stop	HCM 6th Edition	SEB Left	0.060	18.5	C
14	SR-74 @ Palomar Rd	Signalized	HCM 6th Edition	EB Left	0.714	15.5	B
15	SR-74 @ Menifee Rd	Signalized	HCM 6th Edition	EB Left	1.059	107.5	F
16	SR-74 @ Briggs Rd	Signalized	HCM 6th Edition	SB Thru	1.167	144.0	F
17	Matthews Rd @ Palomar Rd	Two-way stop	HCM 6th Edition	SB Left	0.292	31.9	D
	McLaughlin Rd @ Murrieta		HCM 6th				

18	McLaughlin Rd @ Murrieta Rd	Two-way stop	HCM 6th Edition	EB Left	0.012	13.9	B
19	McLaughlin Rd @ Encanto Dr	Two-way stop	HCM 6th Edition	WB Left	0.039	13.0	B
20	McLaughlin Rd @ Trumble Rd	All-way stop	HCM 6th Edition	NB Left	0.065	7.2	A
21	McLaughlin Rd @ Sherman Rd	Two-way stop	HCM 6th Edition	EB Right	0.004	8.3	A
22	Rouse Rd @ Murrieta Rd	Two-way stop	HCM 6th Edition	EB Left	0.031	14.7	B
23	Rouse Rd @ Encanto Dr	Two-way stop	HCM 6th Edition	WB Left	0.213	14.1	B
24	McCall Blvd @ Bradley Rd	Signalized	HCM 6th Edition	EB Left	0.810	20.3	C
25	McCall Blvd @ I-215 SB	Signalized	HCM 6th Edition	SB Right	0.760	19.0	B
26	McCall Blvd @ I-215 NB	Signalized	HCM 6th Edition	NB Left	0.792	21.6	C
27	McCall Blvd @ Encanto Dr	Signalized	HCM 6th Edition	WB Left	0.761	27.4	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Case Rd/Bonnie Dr @ I-215 SB

Control Type:	Signalized	Delay (sec / veh):	60.4
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.979

Intersection Setup

Name	Case Rd		I-215 SB		Bonnie Dr	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration	↵		↵		↵	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1
Entry Pocket Length [ft]	115.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Case Rd		I-215 SB		Bonnie Dr	
Base Volume Input [veh/h]	708	415	656	20	37	178
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	736	432	682	21	38	185
Peak Hour Factor	0.9730	0.9730	0.9730	0.9730	0.9730	0.9730
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	189	111	175	5	10	48
Total Analysis Volume [veh/h]	756	444	701	22	39	190
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing in	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Overlap	Split	Overlap
Signal Group	1	6	2	2	3	3
Auxiliary Signal Groups				1,2,3,6		1,2,3,6
Lead / Lag	Lag	-	-	-	Lead	-
Minimum Green [s]	5	5	5	5	5	5
Maximum Green [s]	30	30	30	30	30	30
Amber [s]	3.0	4.3	4.3	4.3	4.3	4.3
All red [s]	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	62	99	37	37	21	21
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	5	5	5	5	5
Pedestrian Clearance [s]	0	17	7	7	10	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	3.3	3.3	3.3	3.3	3.3
Minimum Recall	No	No	No	No	No	No
Maximum Recall	No	No	No	No	No	No
Pedestrian Recall	No	No	No	No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	R
C, Cycle Length [s]	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	5.30	5.30	5.30	5.30	5.30
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	3.30	3.30	0.00	3.30	0.00
g_i, Effective Green Time [s]	58	104	42	153	5	153
g / C, Green / Cycle	0.48	0.87	0.35	1.28	0.04	1.28
(v / s)_i Volume / Saturation Flow Rate	0.53	0.24	0.37	0.01	0.02	0.12
s, saturation flow rate [veh/h]	1417	1870	1870	1589	1781	1589
c, Capacity [veh/h]	716	1626	662	2029	75	2029
d1, Uniform Delay [s]	34.54	1.34	38.77	0.00	56.28	0.00
k, delay calibration	0.50	0.39	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	49.15	0.32	51.87	0.01	5.46	0.09
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	0.78	1.00	0.78
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.06	0.27	1.06	0.01	0.52	0.09
d, Delay for Lane Group [s/veh]	83.69	1.66	90.64	0.01	61.74	0.09
Lane Group LOS	F	A	F	A	E	A
Critical Lane Group	Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	30.52	0.60	27.95	0.01	1.24	0.05
50th-Percentile Queue Length [ft/ln]	762.96	15.02	698.64	0.14	31.12	1.29
95th-Percentile Queue Length [veh/ln]	41.28	1.08	38.12	0.01	2.24	0.09
95th-Percentile Queue Length [ft/ln]	1031.90	27.03	953.06	0.25	56.02	2.32

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	83.69	1.66	90.64	0.01	61.74	0.09
Movement LOS	F	A	F	A	E	A
d_A, Approach Delay [s/veh]	53.34		87.88		10.59	
Approach LOS	D		F		B	
d_I, Intersection Delay [s/veh]	60.40					
Intersection LOS	E					
Intersection V/C	0.979					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	2.911	2.543	3.522
Crosswalk LOS	C	B	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1562	528	262
d_b, Bicycle Delay [s]	2.88	32.49	45.33
I_b,int, Bicycle LOS Score for Intersection	3.540	2.753	1.560
Bicycle LOS	D	C	A

Sequence




Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: SR-74 @ I-215 NB

Control Type:	Signalized	Delay (sec / veh):	14.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.780

Intersection Setup

Name	I-215 NB		SR-74		Case Rd	
Approach	Southbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	150.00	245.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	I-215 NB		SR-74		Case Rd	
Base Volume Input [veh/h]	238	321	804	491	21	812
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	248	334	836	511	22	844
Peak Hour Factor	0.9830	0.9830	0.9830	0.9830	0.9830	0.9830
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	63	85	213	130	6	215
Total Analysis Volume [veh/h]	252	340	850	520	22	859
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing in	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Permissive	Overlap	Protected	Permissive
Signal Group	7	0	6	6	5	2
Auxiliary Signal Groups				2,5,6,7		
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	5	5	5	5
Maximum Green [s]	30	0	30	30	30	30
Amber [s]	4.3	0.0	4.3	4.3	3.0	4.3
All red [s]	1.0	0.0	1.0	1.0	1.0	1.0
Split [s]	11	0	25	25	24	49
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	3.0
Walk [s]	0	0	5	5	0	5
Pedestrian Clearance [s]	0	0	10	10	0	14
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	3.3	0.0	3.3	3.3	2.0	3.3
Minimum Recall	No		No	No	No	No
Maximum Recall	No		No	No	No	No
Pedestrian Recall	No		No	No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C
C, Cycle Length [s]	58	58	58	58	58
L, Total Lost Time per Cycle [s]	5.30	5.30	4.87	4.00	5.30
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	3.30	3.30	0.00	2.00	3.30
g_i, Effective Green Time [s]	24	18	70	2	24
g / C, Green / Cycle	0.41	0.31	1.20	0.03	0.41
(v / s)_i Volume / Saturation Flow Rate	0.36	0.24	0.33	0.02	0.24
s, saturation flow rate [veh/h]	1666	3560	1589	1417	3560
c, Capacity [veh/h]	678	1122	1910	124	1463
d1, Uniform Delay [s]	15.90	17.97	0.00	29.16	13.33
k, delay calibration	0.20	0.11	0.17	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.65	1.08	0.12	0.68	0.38
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	0.76	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.87	0.76	0.27	0.18	0.59
d, Delay for Lane Group [s/veh]	22.55	19.05	0.12	29.84	13.71
Lane Group LOS	C	B	A	C	B
Critical Lane Group	Yes	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	6.78	4.36	0.06	0.30	3.45
50th-Percentile Queue Length [ft/ln]	169.46	108.93	1.54	7.62	86.18
95th-Percentile Queue Length [veh/ln]	11.05	7.78	0.11	0.55	6.21
95th-Percentile Queue Length [ft/ln]	276.21	194.51	2.78	13.71	155.13

Movement, Approach, & Intersection Results

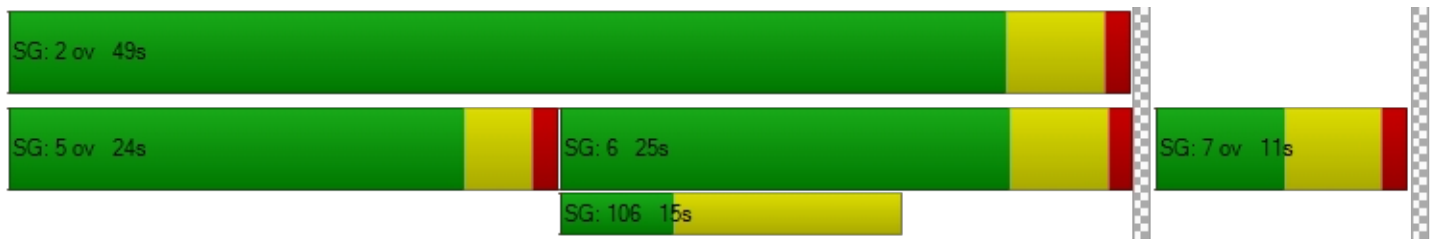
d_M, Delay for Movement [s/veh]	22.55	22.55	19.05	0.12	29.84	13.71
Movement LOS	C	C	B	A	C	B
d_A, Approach Delay [s/veh]	22.55		11.86		14.11	
Approach LOS	C		B		B	
d_I, Intersection Delay [s/veh]	14.79					
Intersection LOS	B					
Intersection V/C	0.780					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	5.7	5.7
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	24.57	24.57
I_p,int, Pedestrian LOS Score for Intersection	2.556	3.011	2.891
Crosswalk LOS	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	190	657	1457
d_b, Bicycle Delay [s]	24.57	13.53	2.21
I_b,int, Bicycle LOS Score for Intersection	2.536	2.690	2.286
Bicycle LOS	B	B	B

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: SR-74 @ Trumble Rd

Control Type:	Signalized	Delay (sec / veh):	30.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.821

Intersection Setup

Name	Trumble		SR-74		SR-74	
Approach	Southwestbound		Northwestbound		Southeastbound	
Lane Configuration	↵↵		↑↑		↵↑↑	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	255.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		Yes	

Volumes

Name	Trumble		SR-74		SR-74	
Base Volume Input [veh/h]	145	361	1040	90	228	754
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	151	375	1082	94	237	784
Peak Hour Factor	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	40	100	289	25	63	209
Total Analysis Volume [veh/h]	161	400	1155	100	253	837
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing in	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Protected	Permissive
Signal Group	7	0	6	0	5	2
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	5	0	5	5
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	4.3	0.0	4.3	0.0	3.0	4.3
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	21	0	21	0	18	39
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	10	0	10	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	3.3	0.0	3.3	0.0	2.0	3.3
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C	L	C
C, Cycle Length [s]	80	80	80	80	80	80
L, Total Lost Time per Cycle [s]	5.30	5.30	5.30	5.30	4.00	5.30
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.30	3.30	3.30	3.30	2.00	3.30
g_i, Effective Green Time [s]	22	22	29	29	14	47
g / C, Green / Cycle	0.28	0.28	0.37	0.37	0.17	0.59
(v / s)_i Volume / Saturation Flow Rate	0.09	0.25	0.34	0.35	0.14	0.24
s, saturation flow rate [veh/h]	1781	1589	1870	1819	1781	3560
c, Capacity [veh/h]	501	447	686	667	302	2087
d1, Uniform Delay [s]	22.71	27.60	24.15	24.50	32.18	8.96
k, delay calibration	0.11	0.19	0.35	0.37	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.37	10.57	14.32	18.51	6.19	0.12
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.32	0.89	0.91	0.94	0.84	0.40
d, Delay for Lane Group [s/veh]	23.08	38.18	38.47	43.00	38.36	9.09
Lane Group LOS	C	D	D	D	D	A
Critical Lane Group	No	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	2.24	7.94	12.63	13.48	4.91	3.11
50th-Percentile Queue Length [ft/ln]	56.10	198.39	315.80	336.91	122.67	77.84
95th-Percentile Queue Length [veh/ln]	4.04	12.56	18.46	19.50	8.54	5.60
95th-Percentile Queue Length [ft/ln]	100.97	313.89	461.52	487.43	213.49	140.11

Movement, Approach, & Intersection Results

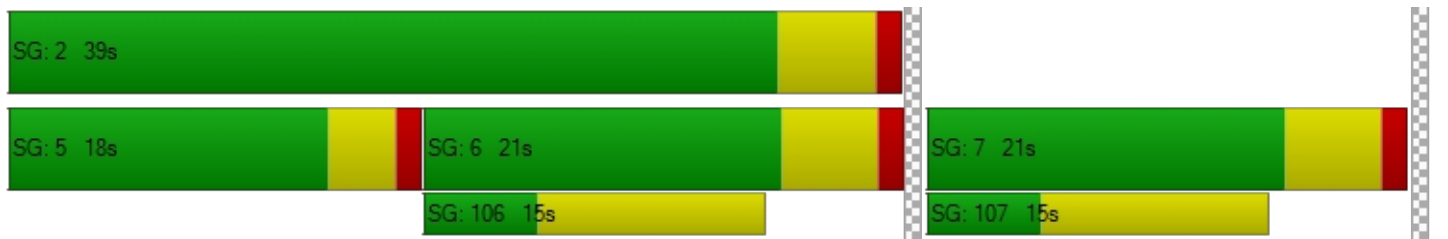
d_M, Delay for Movement [s/veh]	23.08	38.18	40.54	43.00	38.36	9.09
Movement LOS	C	D	D	D	D	A
d_A, Approach Delay [s/veh]	33.84		40.73		15.88	
Approach LOS	C		D		B	
d_I, Intersection Delay [s/veh]	30.08					
Intersection LOS	C					
Intersection V/C	0.821					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	21.68
I_p,int, Pedestrian LOS Score for Intersection	2.366	0.000	3.054
Crosswalk LOS	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	523	523	1123
d_b, Bicycle Delay [s]	16.35	16.35	5.76
I_b,int, Bicycle LOS Score for Intersection	1.560	2.595	2.459
Bicycle LOS	A	B	B

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: SR-74 @ Sherman Rd

Control Type:	Signalized	Delay (sec / veh):	17.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.665

Intersection Setup

Name	Sherman Rd			Sherman Rd			SR-74			SR-74		
Approach	Southbound			Northeastbound			Northwestbound			Southeastbound		
Lane Configuration	Y			↶↷			↶↷			↶↷		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	120.00	185.00	100.00	100.00	270.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			40.00			30.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Sherman Rd			Sherman Rd			SR-74			SR-74		
Base Volume Input [veh/h]	0	2	92	63	16	146	118	1140	6	7	849	56
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	2	96	66	17	152	123	1186	6	7	883	58
Peak Hour Factor	0.9500	0.9420	0.9420	0.9420	0.9420	0.9500	0.9500	0.9500	0.9500	0.9420	0.9500	0.9420
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	25	18	5	40	32	312	2	2	232	15
Total Analysis Volume [veh/h]	0	2	102	70	18	160	129	1248	6	7	929	62
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	2	0	0	1	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.2	0.0	3.0	4.3	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	10	0	0	19	0	10	20	0	11	21	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.2	0.0	2.0	3.3	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	50	50	50	50	50	50	50	50	50
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.20	4.20	4.00	5.30	5.30
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.20	2.20	2.00	3.30	3.30
g_i, Effective Green Time [s]	4	7	7	5	22	22	0	17	17
g / C, Green / Cycle	0.08	0.14	0.14	0.10	0.44	0.44	0.01	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	0.07	0.05	0.10	0.07	0.34	0.34	0.00	0.27	0.27
s, saturation flow rate [veh/h]	1594	1798	1589	1781	1870	1867	1781	1870	1829
c, Capacity [veh/h]	134	259	228	174	826	825	17	621	607
d1, Uniform Delay [s]	22.65	19.45	20.57	22.16	11.84	11.84	24.86	15.39	15.39
k, delay calibration	0.11	0.11	0.11	0.11	0.13	0.13	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.18	0.77	3.87	6.14	1.74	1.75	15.75	2.55	2.61
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.78	0.34	0.70	0.74	0.76	0.76	0.42	0.81	0.81
d, Delay for Lane Group [s/veh]	31.83	20.23	24.44	28.30	13.58	13.58	40.61	17.94	18.00
Lane Group LOS	C	C	C	C	B	B	D	B	B
Critical Lane Group	Yes	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.47	0.85	1.78	1.65	5.05	5.04	0.15	4.39	4.31
50th-Percentile Queue Length [ft/ln]	36.77	21.35	44.52	41.24	126.21	126.09	3.64	109.82	107.65
95th-Percentile Queue Length [veh/ln]	2.65	1.54	3.21	2.97	8.73	8.73	0.26	7.83	7.71
95th-Percentile Queue Length [ft/ln]	66.18	38.44	80.14	74.23	218.34	218.17	6.55	195.75	192.73

Movement, Approach, & Intersection Results

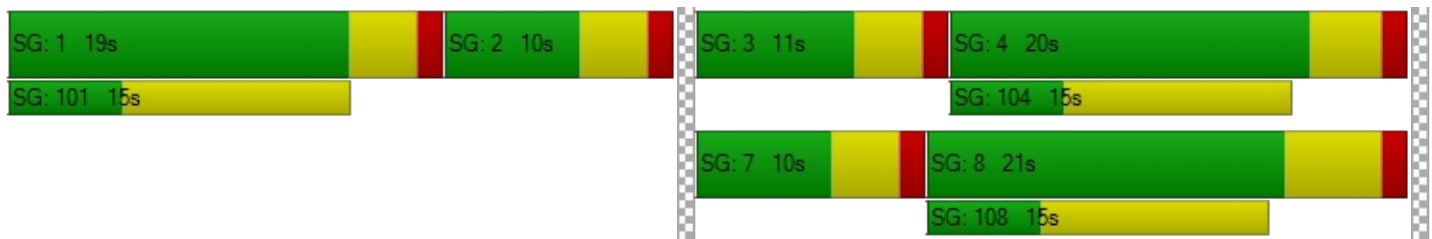
d_M, Delay for Movement [s/veh]	31.83	31.83	31.83	20.23	20.23	24.44	28.30	13.58	13.58	40.61	17.97	18.00
Movement LOS	C	C	C	C	C	C	C	B	B	D	B	B
d_A, Approach Delay [s/veh]	31.83			22.94			14.95			18.13		
Approach LOS	C			C			B			B		
d_I, Intersection Delay [s/veh]	17.48											
Intersection LOS	B											
Intersection V/C	0.665											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	21.68	21.68	0.00
I_p,int, Pedestrian LOS Score for Intersection	1.750	2.112	2.763	0.000
Crosswalk LOS	A	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	200	500	527	523
d_b, Bicycle Delay [s]	24.30	16.88	16.28	16.35
I_b,int, Bicycle LOS Score for Intersection	1.731	1.969	2.701	2.383
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Ethanac Rd @ Murrieta Rd

Control Type:	Signalized	Delay (sec / veh):	22.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.656

Intersection Setup

Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	200.00	100.00	100.00	315.00	100.00	100.00	200.00	100.00	100.00	200.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			No		

Volumes

Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	184	188	145	19	43	13	10	574	78	102	495	330
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	191	196	151	20	45	14	10	597	81	106	515	343
Peak Hour Factor	0.9150	0.9150	0.9150	0.9150	0.9150	0.9150	0.9150	0.9150	0.9150	0.9150	0.9150	0.9150
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	52	54	41	5	12	4	3	163	22	29	141	94
Total Analysis Volume [veh/h]	209	214	165	22	49	15	11	652	89	116	563	375
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	1	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	4.3	0.0	3.0	4.7	0.0	3.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	21	0	0	24	0	21	23	0	22	24	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	3.3	0.0	2.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	58	58	58	58	58	58	58	58	58	58	58
L, Total Lost Time per Cycle [s]	4.00	4.00	5.30	5.30	5.30	4.00	5.70	5.70	4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	3.30	3.30	3.30	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	15	15	4	4	4	1	15	15	5	19	19
g / C, Green / Cycle	0.26	0.26	0.07	0.07	0.07	0.01	0.25	0.25	0.09	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	0.12	0.22	0.01	0.03	0.01	0.01	0.20	0.20	0.07	0.27	0.27
s, saturation flow rate [veh/h]	1781	1737	1781	1870	1589	1781	1870	1792	1781	1870	1624
c, Capacity [veh/h]	472	460	116	122	104	25	476	456	155	612	532
d1, Uniform Delay [s]	17.71	20.00	25.62	25.98	25.54	28.31	20.17	20.19	25.80	17.90	17.91
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.65	3.76	0.78	2.13	0.63	11.28	3.06	3.22	6.94	2.79	3.22
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.44	0.82	0.19	0.40	0.14	0.43	0.79	0.80	0.75	0.82	0.82
d, Delay for Lane Group [s/veh]	18.37	23.76	26.40	28.11	26.18	39.59	23.24	23.41	32.74	20.70	21.12
Lane Group LOS	B	C	C	C	C	D	C	C	C	C	C
Critical Lane Group	No	Yes	No	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.03	4.47	0.28	0.65	0.19	0.21	4.27	4.13	1.65	5.28	4.65
50th-Percentile Queue Length [ft/ln]	50.81	111.67	6.99	16.17	4.78	5.31	106.83	103.15	41.13	131.91	116.22
95th-Percentile Queue Length [veh/ln]	3.66	7.93	0.50	1.16	0.34	0.38	7.66	7.43	2.96	9.04	8.18
95th-Percentile Queue Length [ft/ln]	91.47	198.33	12.58	29.11	8.60	9.56	191.58	185.68	74.03	226.08	204.62

Movement, Approach, & Intersection Results

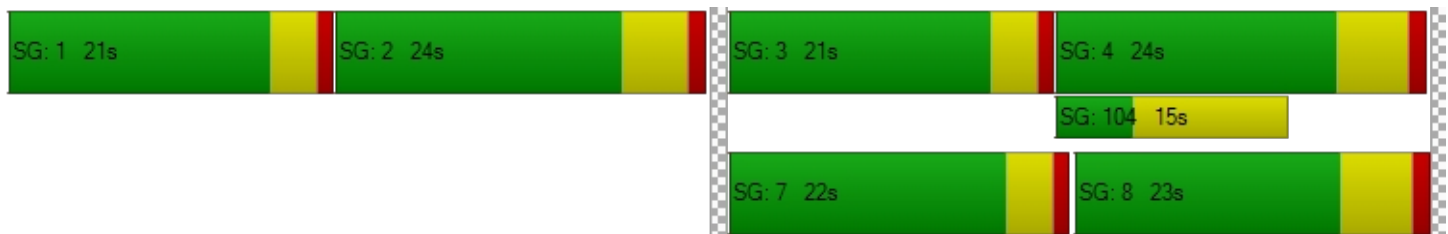
d_M, Delay for Movement [s/veh]	18.37	23.76	23.76	26.40	28.11	26.18	39.59	23.31	23.41	32.74	20.74	21.12
Movement LOS	B	C	C	C	C	C	D	C	C	C	C	C
d_A, Approach Delay [s/veh]	21.84			27.34			23.56			22.20		
Approach LOS	C			C			C			C		
d_I, Intersection Delay [s/veh]	22.71											
Intersection LOS	C											
Intersection V/C	0.656											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			9.0			0.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	0.00			36.45			0.00			0.00		
I_p,int, Pedestrian LOS Score for Intersection	0.000			2.383			0.000			0.000		
Crosswalk LOS	F			B			F			F		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	378			416			384			407		
d_b, Bicycle Delay [s]	29.61			28.24			29.36			28.56		
I_b,int, Bicycle LOS Score for Intersection	2.530			1.702			2.180			2.429		
Bicycle LOS	B			A			B			B		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Ethanac Rd @ Case Rd/Barnett Rd

Control Type:	Signalized	Delay (sec / veh):	18.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.651

Intersection Setup

Name	Barnett Rd			Case Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			← → ← →			← →			← →		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	230.00	100.00	120.00	150.00	100.00	100.00	110.00	100.00	270.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			40.00			30.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Barnett Rd			Case Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	21	3	80	310	0	118	109	728	26	60	870	352
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0000	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	22	3	83	322	0	123	113	757	27	62	905	366
Peak Hour Factor	0.9300	0.9300	0.9300	0.9300	1.0000	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	1	22	87	0	33	30	203	7	17	243	98
Total Analysis Volume [veh/h]	24	3	89	346	0	132	122	814	29	67	973	394
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Version 2020 (SP 0-8)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Permiss	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	7	0	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	0	5	0	5	0	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	30	0	0	30	30	0	30	30	0
Amber [s]	0.0	3.2	0.0	3.0	0.0	0.0	3.0	3.2	0.0	3.0	4.7	0.0
All red [s]	0.0	1.0	0.0	1.0	0.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	10	0	34	0	0	9	30	0	16	37	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	0.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	5	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	10	0	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No		No				No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	0.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	2.0	0.0	0.0	2.0	2.2	0.0	2.0	3.7	0.0
Minimum Recall		No		No			No	No		No	No	
Maximum Recall		No		No			No	No		No	No	
Pedestrian Recall		No		No			No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	R	L	C	R	L	C	R
C, Cycle Length [s]	57	57	57	57	57	57	57	57	57
L, Total Lost Time per Cycle [s]	4.20	4.00	4.00	4.00	4.20	4.20	4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.00	2.00	2.00	2.20	2.20	2.00	3.70	3.70
g_i, Effective Green Time [s]	5	9	9	5	23	23	3	20	20
g / C, Green / Cycle	0.09	0.15	0.15	0.09	0.41	0.41	0.06	0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.07	0.10	0.05	0.07	0.23	0.02	0.04	0.27	0.25
s, saturation flow rate [veh/h]	1632	3459	2813	1781	3560	1589	1781	3560	1589
c, Capacity [veh/h]	151	529	430	163	1452	648	103	1238	553
d1, Uniform Delay [s]	25.16	22.63	21.37	25.14	12.90	10.14	26.17	16.62	16.06
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.93	1.38	0.40	6.67	0.34	0.03	6.74	1.14	1.73
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.77	0.65	0.31	0.75	0.56	0.04	0.65	0.79	0.71
d, Delay for Lane Group [s/veh]	33.08	24.01	21.77	31.80	13.24	10.16	32.92	17.76	17.78
Lane Group LOS	C	C	C	C	B	B	C	B	B
Critical Lane Group	Yes	Yes	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	1.75	2.02	0.72	1.80	3.46	0.20	0.96	4.53	3.65
50th-Percentile Queue Length [ft/ln]	43.87	50.53	17.89	44.89	86.57	4.88	24.01	113.19	91.35
95th-Percentile Queue Length [veh/ln]	3.16	3.64	1.29	3.23	6.23	0.35	1.73	8.02	6.58
95th-Percentile Queue Length [ft/ln]	78.97	90.95	32.19	80.81	155.83	8.78	43.22	200.42	164.44

Movement, Approach, & Intersection Results

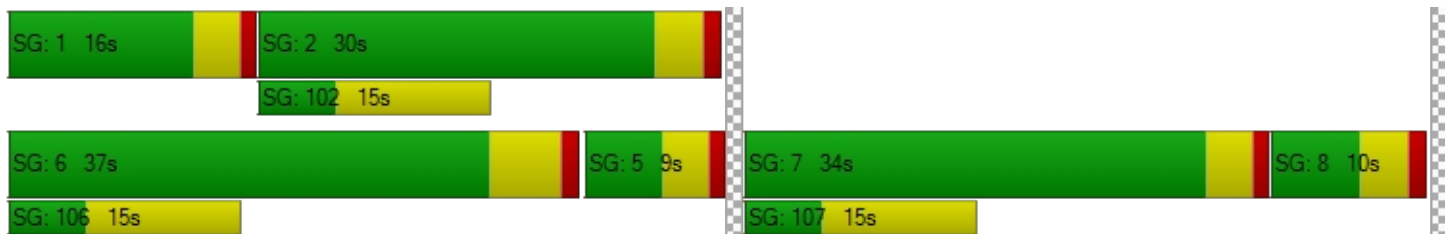
d_M, Delay for Movement [s/veh]	33.08	33.08	33.08	24.01	0.00	21.77	31.80	13.24	10.16	32.92	17.76	17.78
Movement LOS	C	C	C	C		C	C	B	B	C	B	B
d_A, Approach Delay [s/veh]	33.08			23.39			15.49			18.48		
Approach LOS	C			C			B			B		
d_I, Intersection Delay [s/veh]	18.87											
Intersection LOS	B											
Intersection V/C	0.651											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	0.00
I_p,int, Pedestrian LOS Score for Intersection	1.820	2.561	2.795	0.000
Crosswalk LOS	A	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	129	667	573	696
d_b, Bicycle Delay [s]	39.39	20.00	22.90	19.14
I_b,int, Bicycle LOS Score for Intersection	1.751	1.560	2.356	2.743
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: Ethanac Rd @ I-215 SB

Control Type:	Signalized	Delay (sec / veh):	15.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.628

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	240.00	100.00	100.00	100.00	275.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			45.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name				I-215 SB			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	0	0	0	103	1	200	0	589	402	112	619	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0600	1.0600	1.0600	1.0000	1.0600	1.0600	1.0600	1.0600	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	109	1	212	0	624	426	119	656	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9600	0.9600	0.9600	1.0000	0.9600	0.9600	0.9600	0.9600	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	28	0	55	0	163	111	31	171	0
Total Analysis Volume [veh/h]	0	0	0	114	1	221	0	650	444	124	683	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Version 2020 (SP 0-8)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	70
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	5	0	0	5	0	5	5	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	4.3	0.0	0.0	4.7	0.0	3.0	4.7	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	21	0	0	32	0	17	49	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	10	0	0	10	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	3.3	0.0	0.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall					No			No		No	No	
Maximum Recall					No			No		No	No	
Pedestrian Recall					No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		C	R	C	R	L	C
C, Cycle Length [s]		70	70	70	70	70	70
L, Total Lost Time per Cycle [s]		5.30	5.30	5.70	5.70	4.00	5.70
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		3.30	3.30	3.70	3.70	2.00	3.70
g_i, Effective Green Time [s]		12	12	37	37	6	47
g / C, Green / Cycle		0.17	0.17	0.53	0.53	0.09	0.67
(v / s)_i Volume / Saturation Flow Rate		0.06	0.14	0.35	0.28	0.07	0.19
s, saturation flow rate [veh/h]		1782	1589	1870	1589	1781	3560
c, Capacity [veh/h]		302	269	980	833	165	2399
d1, Uniform Delay [s]		25.87	28.11	12.17	11.02	31.03	4.61
k, delay calibration		0.11	0.11	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		0.79	6.17	3.53	2.44	6.72	0.30
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.38	0.82	0.66	0.53	0.75	0.28
d, Delay for Lane Group [s/veh]		26.66	34.28	15.70	13.45	37.75	4.91
Lane Group LOS		C	C	B	B	D	A
Critical Lane Group		No	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		1.62	3.70	6.39	3.92	2.16	1.17
50th-Percentile Queue Length [ft/ln]		40.43	92.50	159.66	97.96	53.95	29.37
95th-Percentile Queue Length [veh/ln]		2.91	6.66	10.53	7.05	3.88	2.11
95th-Percentile Queue Length [ft/ln]		72.78	166.50	263.27	176.32	97.11	52.86

Movement, Approach, & Intersection Results

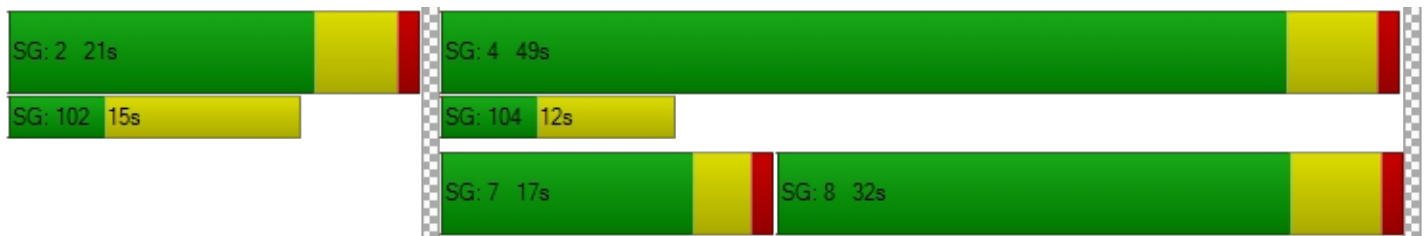
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	26.66	26.66	34.28	0.00	15.70	13.45	37.75	4.91	0.00
Movement LOS				C	C	C		B	B	D	A	
d_A, Approach Delay [s/veh]	0.00			31.68			14.79			9.96		
Approach LOS	A			C			B			A		
d_I, Intersection Delay [s/veh]	15.58											
Intersection LOS	B											
Intersection V/C	0.628											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	26.58	0.00	26.58
I_p,int, Pedestrian LOS Score for Intersection	0.000	1.949	0.000	2.758
Crosswalk LOS	F	A	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	449	751	1237
d_b, Bicycle Delay [s]	35.00	21.06	13.64	5.09
I_b,int, Bicycle LOS Score for Intersection	4.132	2.114	3.365	2.225
Bicycle LOS	D	B	C	B

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 8: Ethanac Rd @ I-215 NB

Control Type:	Signalized	Delay (sec / veh):	27.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.799

Intersection Setup

Name	I-215 NB			Ethanac Rd			Ethanac Rd					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	265.00	100.00	100.00	100.00	245.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name	I-215 NB						Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	288	3	109	0	0	0	204	487	0	0	456	152
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0000	1.0000	1.0000	1.0600	1.0600	1.0000	1.0000	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	305	3	116	0	0	0	216	516	0	0	483	161
Peak Hour Factor	0.9440	0.9440	0.9440	1.0000	1.0000	1.0000	0.9440	0.9440	1.0000	1.0000	0.9440	0.9440
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	81	1	31	0	0	0	57	137	0	0	128	43
Total Analysis Volume [veh/h]	323	3	123	0	0	0	229	547	0	0	512	171
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Version 2020 (SP 0-8)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	0	0	0	5	5	0	0	5	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	3.2	0.0	0.0	0.0	0.0	3.0	4.7	0.0	0.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	17	0	0	0	0	16	43	0	0	27	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	7	0	0	0	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	0.0	0.0	2.0	3.7	0.0	0.0	3.7	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R		L	C	C
C, Cycle Length [s]	60	60		60	60	60
L, Total Lost Time per Cycle [s]	4.20	4.20		4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20		2.00	3.70	3.70
g_i, Effective Green Time [s]	13	13		10	37	24
g / C, Green / Cycle	0.21	0.21		0.16	0.62	0.40
(v / s)_i Volume / Saturation Flow Rate	0.18	0.08		0.13	0.29	0.38
s, saturation flow rate [veh/h]	1782	1589		1781	1870	1791
c, Capacity [veh/h]	378	337		291	1166	705
d1, Uniform Delay [s]	22.86	20.25		24.18	6.03	17.87
k, delay calibration	0.11	0.11		0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	5.91	0.66		4.74	1.36	27.03
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.86	0.36		0.79	0.47	0.97
d, Delay for Lane Group [s/veh]	28.78	20.91		28.91	7.39	44.90
Lane Group LOS	C	C		C	A	D
Critical Lane Group	Yes	No		Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	4.72	1.43		3.06	2.36	12.25
50th-Percentile Queue Length [ft/ln]	118.04	35.81		76.50	59.02	306.34
95th-Percentile Queue Length [veh/ln]	8.29	2.58		5.51	4.25	17.99
95th-Percentile Queue Length [ft/ln]	207.13	64.45		137.71	106.23	449.86

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	28.78	28.78	20.91	0.00	0.00	0.00	28.91	7.39	0.00	0.00	44.90	44.90
Movement LOS	C	C	C				C	A			D	D
d_A, Approach Delay [s/veh]	26.62			0.00			13.74			44.90		
Approach LOS	C			A			B			D		
d_I, Intersection Delay [s/veh]	27.93											
Intersection LOS	C											
Intersection V/C	0.799											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	1.914	0.000	0.000	0.000
Crosswalk LOS	A	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	427	0	1243	710
d_b, Bicycle Delay [s]	18.57	30.00	4.29	12.48
I_b,int, Bicycle LOS Score for Intersection	2.300	4.132	2.840	2.687
Bicycle LOS	B	D	C	B

Sequence

Ring 1	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 9: Ethanac Rd @ Encanto Dr

Control Type:	Two-way stop	Delay (sec / veh):	70.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.636

Intersection Setup

Name	Encanto Dr		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Encanto Dr		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	92	75	485	115	41	519
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	98	80	514	122	43	550
Peak Hour Factor	0.9250	0.9250	0.9250	0.9250	0.9250	0.9250
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	22	139	33	12	149
Total Analysis Volume [veh/h]	106	86	556	132	46	595
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.64	0.18	0.01	0.00	0.05	0.01
d_M, Delay for Movement [s/veh]	70.09	55.90	0.00	0.00	9.19	0.00
Movement LOS	F	F	A	A	A	A
95th-Percentile Queue Length [veh/ln]	6.15	6.15	0.00	0.00	0.16	0.00
95th-Percentile Queue Length [ft/ln]	153.85	153.85	0.00	0.00	4.01	0.00
d_A, Approach Delay [s/veh]	63.74		0.00		0.66	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	8.32					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 10: Ethanac Rd @ Trumble Rd

Control Type:	Signalized	Delay (sec / veh):	17.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.635

Intersection Setup

Name	Trumble Rd			Trumble Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇐⇈			⇈⇐			⇈⇈⇈			⇈⇐		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	85.00	100.00	100.00	100.00	100.00	100.00	155.00	100.00	100.00	110.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Trumble Rd			Trumble Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	4	1	6	17	1	138	109	432	2	7	437	14
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	1	6	18	1	146	116	458	2	7	463	15
Peak Hour Factor	0.8930	0.8930	0.8930	0.8930	0.8930	0.8930	0.8930	0.8930	0.8930	0.8930	0.8930	0.8930
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	2	5	0	41	32	128	1	2	130	4
Total Analysis Volume [veh/h]	4	1	7	20	1	163	130	513	2	8	518	17
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	0	5	5	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.2	0.0	3.0	3.2	0.0	3.0	4.7	0.0	3.0	4.7	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	19	20	0	10	11	0	9	21	0	9	21	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	5	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	10	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.2	0.0	2.0	2.2	0.0	2.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.20	4.00	4.20	4.00	5.70	5.70	4.00	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.20	2.00	2.20	2.00	3.70	3.70	2.00	3.70
g_i, Effective Green Time [s]	0	7	1	8	6	33	33	1	28
g / C, Green / Cycle	0.01	0.11	0.02	0.13	0.10	0.55	0.55	0.01	0.47
(v / s)_i Volume / Saturation Flow Rate	0.00	0.00	0.01	0.10	0.07	0.27	0.00	0.00	0.29
s, saturation flow rate [veh/h]	1781	1620	1781	1591	1781	1870	1589	1781	1860
c, Capacity [veh/h]	13	184	46	211	173	1030	876	22	867
d1, Uniform Delay [s]	29.77	23.80	28.93	25.31	26.50	8.38	6.09	29.54	12.07
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	12.17	0.10	6.21	6.13	6.36	1.72	0.00	9.63	3.29
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.30	0.04	0.43	0.78	0.75	0.50	0.00	0.36	0.62
d, Delay for Lane Group [s/veh]	41.94	23.90	35.14	31.44	32.86	10.10	6.09	39.17	15.36
Lane Group LOS	D	C	D	C	C	B	A	D	B
Critical Lane Group	Yes	No	No	Yes	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.10	0.10	0.35	2.49	1.89	3.09	0.01	0.16	4.61
50th-Percentile Queue Length [ft/ln]	2.50	2.52	8.78	62.15	47.29	77.15	0.21	4.04	115.37
95th-Percentile Queue Length [veh/ln]	0.18	0.18	0.63	4.47	3.40	5.55	0.02	0.29	8.14
95th-Percentile Queue Length [ft/ln]	4.49	4.54	15.80	111.86	85.12	138.87	0.38	7.27	203.44

Movement, Approach, & Intersection Results

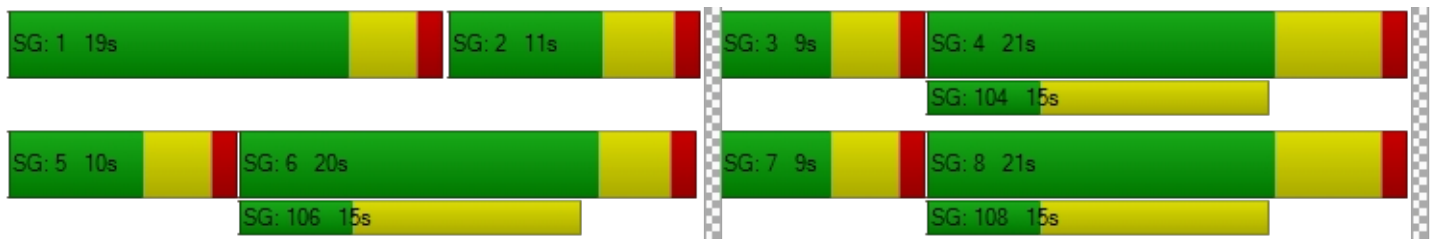
d_M, Delay for Movement [s/veh]	41.94	23.90	23.90	35.14	31.44	31.44	32.86	10.10	6.09	39.17	15.36	15.36
Movement LOS	D	C	C	D	C	C	C	B	A	D	B	B
d_A, Approach Delay [s/veh]	29.91			31.84			14.67			15.71		
Approach LOS	C			C			B			B		
d_I, Intersection Delay [s/veh]	17.49											
Intersection LOS	B											
Intersection V/C	0.635											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	21.68	0.00	21.68
I_p,int, Pedestrian LOS Score for Intersection	1.928	2.029	0.000	2.507
Crosswalk LOS	A	B	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	527	227	510	510
d_b, Bicycle Delay [s]	16.28	23.59	16.65	16.65
I_b,int, Bicycle LOS Score for Intersection	1.579	1.863	2.624	2.456
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 11: Ethanac Rd @ Sherman Rd

Control Type:	Two-way stop	Delay (sec / veh):	35.4
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.056

Intersection Setup

Name	Sherman Rd			Sherman Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Sherman Rd			Sherman Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	6	3	2	4	3	102	97	340	13	8	354	3
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	3	2	4	3	108	103	360	14	8	375	3
Peak Hour Factor	0.8920	0.8920	0.8920	0.8920	0.8920	0.8920	0.8920	0.8920	0.8920	0.8920	0.8920	0.8920
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	1	1	1	1	30	29	101	4	2	105	1
Total Analysis Volume [veh/h]	7	3	2	4	3	121	115	404	16	9	420	3
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.02	0.00	0.02	0.02	0.19	0.10	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	35.35	26.11	12.43	28.02	26.42	12.64	8.52	0.00	0.00	8.19	0.00	0.00
Movement LOS	E	D	B	D	D	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.24	0.24	0.24	0.89	0.89	0.89	0.34	0.34	0.34	0.02	0.02	0.02
95th-Percentile Queue Length [ft/ln]	5.98	5.98	5.98	22.17	22.17	22.17	8.42	8.42	8.42	0.60	0.60	0.60
d_A, Approach Delay [s/veh]	29.22			13.44			1.83			0.17		
Approach LOS	D			B			A			A		
d_I, Intersection Delay [s/veh]	2.82											
Intersection LOS	E											

Intersection Level Of Service Report
Intersection 12: Ethanac Rd @ Dawson Rd

Control Type:	Two-way stop	Delay (sec / veh):	10.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

Name	Dawson Rd		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Dawson Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	2	377	1	3	332
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	2	400	1	3	352
Peak Hour Factor	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	106	0	1	93
Total Analysis Volume [veh/h]	0	2	423	1	3	372
Pedestrian Volume [ped/h]	0		0		0	

Version 2020 (SP 0-8)

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	15.24	10.73	0.00	0.00	8.18	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.00	0.00	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.24	0.24	0.00	0.00	0.20	0.20
d_A, Approach Delay [s/veh]	10.73		0.00		0.07	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.06					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 13: Ethanac Rd @ Antelope Rd

Control Type:	Two-way stop	Delay (sec / veh):	18.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.060

Intersection Setup

Name	Antelope Rd			Ethanac Rd			Matthews Rd			Antelope Rd		
Approach	Northbound			Eastbound			Westbound			Southeastbound		
Lane Configuration	←			→			↑			↘		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	250.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			50.00			50.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Antelope Rd			Ethanac Rd			Matthews Rd			Antelope Rd		
Base Volume Input [veh/h]	9	0	2	1	399	8	2	348	26	15	1	0
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0000	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	9	0	2	1	415	8	2	362	27	16	1	0
Peak Hour Factor	0.9570	0.9570	0.9570	0.9570	0.9570	0.9570	0.9570	0.9570	0.9570	0.9570	0.9570	0.9570
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	1	0	108	2	1	95	7	4	0	0
Total Analysis Volume [veh/h]	9	0	2	1	434	8	2	378	28	17	1	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Free	Free	Stop
Flared Lane	No			No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No			No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00
d_M, Delay for Movement [s/veh]	17.96	17.48	11.19	8.13	0.00	0.00	8.23	0.00	0.00	18.50	17.83	11.33
Movement LOS	C	C	B	A	A	A	A	A	A	C	C	B
95th-Percentile Queue Length [veh/ln]	0.11	0.11	0.11	0.00	0.00	0.00	0.01	0.01	0.01	0.20	0.20	0.20
95th-Percentile Queue Length [ft/ln]	2.68	2.68	2.68	0.07	0.07	0.00	0.13	0.13	0.13	5.02	5.02	5.02
d_A, Approach Delay [s/veh]	16.73			0.02			0.04			18.46		
Approach LOS	C			A			A			C		
d_I, Intersection Delay [s/veh]	0.61											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 14: SR-74 @ Palomar Rd

Control Type:	Signalized	Delay (sec / veh):	15.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.714

Intersection Setup

Name	Palomar Rd			Palomar Rd			SR-74			SR-74		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	200.00	100.00	200.00	190.00	100.00	100.00	240.00	100.00	100.00	230.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Palomar Rd			Palomar Rd			SR-74			SR-74		
Base Volume Input [veh/h]	108	53	231	64	73	34	20	911	42	148	1025	29
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	112	55	240	67	76	35	21	947	44	154	1066	30
Peak Hour Factor	0.9500	0.9430	0.9430	0.9430	0.9430	0.9500	0.9500	0.9500	0.9500	0.9430	0.9500	0.9430
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	29	15	64	18	20	9	6	249	12	41	281	8
Total Analysis Volume [veh/h]	118	58	255	71	81	37	22	997	46	163	1122	32
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	4.3	0.0	0.0	4.3	0.0	3.0	4.3	0.0	3.0	4.3	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	30	0	0	30	0	30	30	0	30	30	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.3	0.0	0.0	3.3	0.0	2.0	3.3	0.0	2.0	3.3	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	47	47	47	47	47	47	47	47	47	47	47	47
L, Total Lost Time per Cycle [s]	5.30	5.30	5.30	5.30	5.30	5.30	4.00	5.30	5.30	4.00	5.30	5.30
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.30	3.30	3.30	3.30	3.30	3.30	2.00	3.30	3.30	2.00	3.30	3.30
g_i, Effective Green Time [s]	10	10	10	10	10	10	1	16	16	6	21	21
g / C, Green / Cycle	0.22	0.22	0.22	0.22	0.22	0.22	0.03	0.35	0.35	0.12	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.09	0.03	0.16	0.05	0.03	0.03	0.01	0.28	0.28	0.09	0.31	0.31
s, saturation flow rate [veh/h]	1274	1870	1589	1345	1870	1680	1781	1870	1841	1781	1870	1852
c, Capacity [veh/h]	343	410	348	357	410	368	48	654	644	218	833	825
d1, Uniform Delay [s]	18.85	14.88	17.17	17.93	14.90	14.93	22.68	13.92	13.92	20.05	10.55	10.55
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.59	0.16	2.97	0.27	0.16	0.20	6.76	2.38	2.41	5.04	1.06	1.08
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.34	0.14	0.73	0.20	0.15	0.16	0.46	0.80	0.80	0.75	0.70	0.70
d, Delay for Lane Group [s/veh]	19.44	15.04	20.14	18.20	15.06	15.13	29.44	16.29	16.33	25.08	11.61	11.63
Lane Group LOS	B	B	C	B	B	B	C	B	B	C	B	B
Critical Lane Group	No	No	Yes	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.04	0.42	2.31	0.59	0.43	0.42	0.29	4.07	4.02	1.73	3.38	3.35
50th-Percentile Queue Length [ft/ln]	26.09	10.43	57.87	14.82	10.83	10.50	7.37	101.82	100.44	43.34	84.43	83.83
95th-Percentile Queue Length [veh/ln]	1.88	0.75	4.17	1.07	0.78	0.76	0.53	7.33	7.23	3.12	6.08	6.04
95th-Percentile Queue Length [ft/ln]	46.96	18.78	104.16	26.67	19.50	18.90	13.27	183.28	180.79	78.01	151.97	150.89

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	19.44	15.04	20.14	18.20	15.08	15.13	29.44	16.31	16.33	25.08	11.62	11.63
Movement LOS	B	B	C	B	B	B	C	B	B	C	B	B
d_A, Approach Delay [s/veh]	19.26			16.26			16.58			13.28		
Approach LOS	B			B			B			B		
d_I, Intersection Delay [s/veh]	15.50											
Intersection LOS	B											
Intersection V/C	0.714											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.512	2.243	3.154	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	549	549	549	549
d_b, Bicycle Delay [s]	23.69	23.69	23.69	23.69
I_b,int, Bicycle LOS Score for Intersection	2.271	1.716	2.438	2.646
Bicycle LOS	B	A	B	B

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: SR-74 @ Menifee Rd

Control Type:	Signalized	Delay (sec / veh):	107.5
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.059

Intersection Setup

Name	Menifee Rd			Menifee Rd			SR-74			SR-74		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	350.00	100.00	100.00	350.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Menifee Rd			Menifee Rd			SR-74			SR-74		
Base Volume Input [veh/h]	123	212	359	114	210	25	98	897	189	251	1050	142
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	128	220	373	119	218	26	102	933	197	261	1092	148
Peak Hour Factor	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	34	59	99	32	58	7	27	249	53	70	291	39
Total Analysis Volume [veh/h]	136	235	398	127	232	28	109	995	210	278	1164	158
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	1	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.9	0.0	0.0	3.9	0.0	3.0	4.7	0.0	3.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	30	0	0	26	0	9	44	0	20	53	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.9	0.0	0.0	2.9	0.0	2.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.90	4.90	4.90	4.00	5.70	5.70	4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.90	2.90	2.90	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	25	25	21	5	33	33	21	49	49
g / C, Green / Cycle	0.21	0.21	0.17	0.04	0.28	0.28	0.18	0.41	0.41
(v / s)_i Volume / Saturation Flow Rate	0.20	0.25	0.21	0.06	0.33	0.33	0.16	0.36	0.36
s, saturation flow rate [veh/h]	1836	1589	1817	1781	1870	1759	1781	1870	1793
c, Capacity [veh/h]	384	333	316	79	522	491	312	767	736
d1, Uniform Delay [s]	47.08	47.51	49.63	57.42	43.31	43.31	48.40	32.53	32.85
k, delay calibration	0.29	0.43	0.33	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	27.75	111.25	118.26	189.08	101.60	106.00	8.57	13.04	14.88
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.97	1.20	1.22	1.38	1.19	1.19	0.89	0.87	0.89
d, Delay for Lane Group [s/veh]	74.83	158.76	167.89	246.50	144.91	149.31	56.98	45.58	47.73
Lane Group LOS	E	F	F	F	F	F	E	D	D
Critical Lane Group	No	Yes	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	13.67	19.97	19.64	6.45	29.40	28.26	8.56	19.33	19.35
50th-Percentile Queue Length [ft/ln]	341.83	499.14	490.97	161.31	735.09	706.40	213.97	483.30	483.69
95th-Percentile Queue Length [veh/ln]	19.74	29.91	29.60	11.45	42.34	41.00	13.36	26.54	26.56
95th-Percentile Queue Length [ft/ln]	493.44	747.82	740.12	286.24	1058.40	1025.12	333.92	663.57	664.03

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	74.83	74.83	158.76	167.89	167.89	167.89	246.50	146.57	149.31	56.98	46.49	47.73
Movement LOS	E	E	F	F	F	F	F	F	F	E	D	D
d_A, Approach Delay [s/veh]	118.27			167.89			155.30			48.44		
Approach LOS	F			F			F			D		
d_I, Intersection Delay [s/veh]	107.49											
Intersection LOS	F											
Intersection V/C	1.059											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.601	2.308	3.174	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	418	352	638	788
d_b, Bicycle Delay [s]	37.53	40.76	27.81	22.02
I_b,int, Bicycle LOS Score for Intersection	2.828	2.198	2.644	2.880
Bicycle LOS	C	B	B	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 16: SR-74 @ Briggs Rd

Control Type:	Signalized	Delay (sec / veh):	144.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.167

Intersection Setup

Name	Briggs Rd			Briggs Rd			SR-74			SR-74		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	200.00	100.00	100.00	150.00	100.00	100.00	130.00	100.00	1084.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Briggs Rd			Briggs Rd			SR-74			SR-74		
Base Volume Input [veh/h]	474	218	132	222	200	103	106	595	605	235	894	162
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	493	227	137	231	208	107	110	619	629	244	930	168
Peak Hour Factor	0.8470	0.8470	0.8470	0.8470	0.8470	0.8470	0.8470	0.8470	0.8470	0.8470	0.8470	0.8470
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	146	67	40	68	61	32	32	183	186	72	274	50
Total Analysis Volume [veh/h]	582	268	162	273	246	126	130	731	743	288	1098	198
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

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Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	1	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	4.3	0.0	3.0	4.7	0.0	3.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	30	0	0	22	0	13	51	0	17	55	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	3.3	0.0	2.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	5.30	5.30	4.00	5.70	5.70	4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	3.30	3.30	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	26	26	17	17	9	37	37	22	49	49
g / C, Green / Cycle	0.22	0.22	0.14	0.14	0.08	0.31	0.31	0.18	0.41	0.41
(v / s)_i Volume / Saturation Flow Rate	0.33	0.25	0.15	0.21	0.07	0.21	0.47	0.16	0.35	0.36
s, saturation flow rate [veh/h]	1781	1753	1781	1765	1781	3560	1589	1781	1870	1773
c, Capacity [veh/h]	386	380	247	244	134	1089	486	322	770	730
d1, Uniform Delay [s]	47.03	47.03	51.72	51.72	55.41	36.39	41.67	48.08	32.09	32.46
k, delay calibration	0.50	0.44	0.15	0.31	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	241.83	84.37	64.89	247.83	30.06	3.30	247.77	8.71	11.74	13.73
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.51	1.13	1.11	1.52	0.97	0.67	1.53	0.90	0.86	0.87
d, Delay for Lane Group [s/veh]	288.86	131.40	116.62	299.55	85.47	39.69	289.44	56.79	43.83	46.19
Lane Group LOS	F	F	F	F	F	D	F	E	D	D
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	37.03	19.84	11.65	23.95	4.91	9.40	47.03	8.86	18.62	18.55
50th-Percentile Queue Length [ft/ln]	925.76	496.04	291.13	598.85	122.71	235.01	1175.84	221.58	465.49	463.85
95th-Percentile Queue Length [veh/ln]	56.65	29.02	18.03	37.45	8.54	14.43	72.30	13.75	25.70	25.62
95th-Percentile Queue Length [ft/ln]	1416.23	725.58	450.79	936.20	213.54	360.71	1807.38	343.64	642.41	640.46

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	288.86	131.40	131.40	116.62	299.55	299.55	85.47	39.69	289.44	56.79	44.78	46.19
Movement LOS	F	F	F	F	F	F	F	D	F	E	D	D
d_A, Approach Delay [s/veh]	221.96			222.13			159.09			47.14		
Approach LOS	F			F			F			D		
d_I, Intersection Delay [s/veh]	144.01											
Intersection LOS	F											
Intersection V/C	1.167											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	0.00
I_p,int, Pedestrian LOS Score for Intersection	3.071	2.560	3.392	0.000
Crosswalk LOS	C	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	433	278	755	822
d_b, Bicycle Delay [s]	36.82	44.46	23.25	20.83
I_b,int, Bicycle LOS Score for Intersection	3.229	2.624	2.883	2.866
Bicycle LOS	C	B	C	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 17: Matthews Rd @ Palomar Rd

Control Type:	Two-way stop	Delay (sec / veh):	31.9
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.292

Intersection Setup

Name	Palomar Rd		Matthews Rd		Matthews Rd	
Approach	Southbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	0	0
Entry Pocket Length [ft]	100.00	200.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Palomar Rd		Matthews Rd		Matthews Rd	
Base Volume Input [veh/h]	51	173	202	128	274	150
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	53	180	210	133	285	156
Peak Hour Factor	0.9690	0.9690	0.9690	0.9690	0.9690	0.9690
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	46	54	34	74	40
Total Analysis Volume [veh/h]	55	186	217	137	294	161
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.29	0.25	0.00	0.00	0.24	0.00
d_M, Delay for Movement [s/veh]	31.85	11.34	0.00	0.00	8.95	0.00
Movement LOS	D	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.16	0.97	0.00	0.00	0.96	0.96
95th-Percentile Queue Length [ft/ln]	28.97	24.25	0.00	0.00	24.01	24.01
d_A, Approach Delay [s/veh]	16.02		0.00		5.78	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	6.18					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 18: McLaughlin Rd @ Murrieta Rd

Control Type:	Two-way stop	Delay (sec / veh):	13.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.012

Intersection Setup

Name	Murrieta Rd			Murrieta Rd			McLaughlin Rd			McLaughlin Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔			↔			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	55.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Murrieta Rd			Murrieta Rd			McLaughlin Rd			McLaughlin Rd		
Base Volume Input [veh/h]	2	227	0	7	171	2	4	0	1	3	0	10
Base Volume Adjustment Factor	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	300	0	9	226	3	5	0	1	4	0	13
Peak Hour Factor	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	79	0	2	60	1	1	0	0	1	0	3
Total Analysis Volume [veh/h]	3	317	0	10	239	3	5	0	1	4	0	14
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.02
d_M, Delay for Movement [s/veh]	7.72	0.00	0.00	7.92	0.00	0.00	13.94	13.70	9.62	13.76	13.77	10.15
Movement LOS	A	A	A	A	A	A	B	B	A	B	B	B
95th-Percentile Queue Length [veh/ln]	0.01	0.00	0.00	0.02	0.00	0.00	0.04	0.04	0.04	0.09	0.09	0.09
95th-Percentile Queue Length [ft/ln]	0.17	0.00	0.00	0.61	0.00	0.00	1.03	1.03	1.03	2.23	2.23	2.23
d_A, Approach Delay [s/veh]	0.07			0.31			13.22			10.95		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	0.64											
Intersection LOS	B											

**Intersection Level Of Service Report
Intersection 19: McLaughlin Rd @ Encanto Dr**

Control Type:	Two-way stop	Delay (sec / veh):	13.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.039

Intersection Setup

Name	Encanto Dr		Encanto Dr		McLaughlin Rd	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00		50.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Encanto Dr		Encanto Dr		McLaughlin Rd	
Base Volume Input [veh/h]	174	10	36	181	15	28
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	181	10	37	188	16	29
Peak Hour Factor	0.8280	0.8280	0.8280	0.8280	0.8280	0.8280
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	55	3	11	57	5	9
Total Analysis Volume [veh/h]	219	12	45	227	19	35
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.03	0.00	0.04	0.04
d_M, Delay for Movement [s/veh]	0.00	0.00	7.79	0.00	12.96	9.91
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.10	0.10	0.27	0.27
95th-Percentile Queue Length [ft/ln]	0.00	0.00	2.61	2.61	6.71	6.71
d_A, Approach Delay [s/veh]	0.00		1.29		10.99	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	1.69					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 20: McLaughlin Rd @ Trumble Rd

Control Type:	All-way stop	Delay (sec / veh):	7.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.065

Intersection Setup

Name	Trumble Rd			Trumble Rd			McLaughlin Rd			McLaughlin Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Trumble Rd			Trumble Rd			McLaughlin Rd			McLaughlin Rd		
Base Volume Input [veh/h]	37	1	0	0	3	4	4	0	16	0	0	0
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	38	1	0	0	3	4	4	0	17	0	0	0
Peak Hour Factor	0.6860	0.6860	0.6860	0.6860	0.6860	0.6860	0.6860	0.6860	0.6860	0.6860	0.6860	0.6860
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	0	0	0	1	1	1	0	6	0	0	0
Total Analysis Volume [veh/h]	55	1	0	0	4	6	6	0	25	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	857	976	991	877
Degree of Utilization, x	0.07	0.01	0.03	0.00

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.21	0.03	0.10	0.00
95th-Percentile Queue Length [ft]	5.23	0.78	2.42	0.00
Approach Delay [s/veh]	7.49	6.73	6.75	0.00
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	7.18			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 21: McLaughlin Rd @ Sherman Rd

Control Type:	Two-way stop	Delay (sec / veh):	8.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.004

Intersection Setup

Name	Sherman Rd			Sherman Rd			McLaughlin Rd			Dawson Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Sherman Rd			Sherman Rd			McLaughlin Rd			Dawson Rd		
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	1	0	0	0
Base Volume Adjustment Factor	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	0	0	1	0	0	0
Peak Hour Factor	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	0	0	1	0	0	0
Total Analysis Volume [veh/h]	0	0	0	0	0	0	0	0	4	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.22	0.00	0.00	7.22	0.00	0.00	8.53	9.03	8.33	8.54	9.02	8.32
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.28	0.28	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	2.41			2.41			8.33			8.63		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	8.33											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 22: Rouse Rd @ Murrieta Rd

Control Type:	Two-way stop	Delay (sec / veh):	14.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.031

Intersection Setup

Name	Murrieta Rd			Murrieta Rd			Rouse Rd			Rouse Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	150.00	100.00	100.00	100.00	100.00	100.00	151.00	100.00	250.00	150.00	100.00	150.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Murrieta Rd			Murrieta Rd			Rouse Rd			Rouse Rd		
Base Volume Input [veh/h]	3	188	8	26	165	1	9	8	6	11	2	35
Base Volume Adjustment Factor	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	248	11	34	218	1	12	11	8	15	3	46
Peak Hour Factor	0.9710	0.9710	0.9710	0.9710	0.9710	0.9710	0.9710	0.9710	0.9710	0.9710	0.9710	0.9710
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	64	3	9	56	0	3	3	2	4	1	12
Total Analysis Volume [veh/h]	4	255	11	35	225	1	12	11	8	15	3	47
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.03	0.00	0.00	0.03	0.03	0.01	0.04	0.01	0.06
d_M, Delay for Movement [s/veh]	7.69	0.00	0.00	7.85	0.00	0.00	14.68	13.82	9.46	14.03	13.54	9.89
Movement LOS	A	A	A	A	A	A	B	B	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.01	0.00	0.00	0.08	0.00	0.00	0.10	0.08	0.03	0.11	0.02	0.19
95th-Percentile Queue Length [ft/ln]	0.22	0.00	0.00	2.08	0.00	0.00	2.41	2.02	0.74	2.82	0.53	4.78
d_A, Approach Delay [s/veh]	0.11			1.05			13.03			11.01		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	2.27											
Intersection LOS	B											

**Intersection Level Of Service Report
Intersection 23: Rouse Rd @ Encanto Dr**

Control Type:	Two-way stop	Delay (sec / veh):	14.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.213

Intersection Setup

Name	Encanto Dr		Encanto Dr		Rouse Rd	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00		50.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Encanto Dr		Encanto Dr		Rouse Rd	
Base Volume Input [veh/h]	170	57	13	149	85	32
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	177	59	14	155	88	33
Peak Hour Factor	0.7850	0.7850	0.7850	0.7850	0.7850	0.7850
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	56	19	4	49	28	11
Total Analysis Volume [veh/h]	225	75	18	197	112	42
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.00	0.21	0.05
d_M, Delay for Movement [s/veh]	0.00	0.00	7.90	0.00	14.12	11.91
Movement LOS	A	A	A	A	B	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.04	0.04	1.07	1.07
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.09	1.09	26.84	26.84
d_A, Approach Delay [s/veh]	0.00		0.66		13.52	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	3.32					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 24: McCall Blvd @ Bradley Rd

Control Type:	Signalized	Delay (sec / veh):	20.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.810

Intersection Setup

Name	Bradley Rd			Bradley Rd			McCall Blvd			McCall Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	90.00	100.00	100.00	365.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Bradley Rd			Bradley Rd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	29	35	226	102	46	8	17	277	29	367	293	36
Base Volume Adjustment Factor	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	38	46	298	135	61	11	22	366	38	484	387	48
Peak Hour Factor	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790	0.8790
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	13	85	38	17	3	6	104	11	138	110	14
Total Analysis Volume [veh/h]	43	52	339	154	69	13	25	416	43	551	440	55
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Overlap	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	6	0	5	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	5	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	30	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.2	3.2	0.0	3.0	0.0	3.0	3.6	0.0	3.0	3.6	0.0
All red [s]	0.0	1.0	1.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	37	37	0	11	0	40	41	0	31	32	0
Vehicle Extension [s]	0.0	3.0	3.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	5	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	26	26	0	0	0	0	23	0	0	22	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	2.2	0.0	2.0	0.0	2.0	2.6	0.0	2.0	2.6	0.0
Minimum Recall		No	No		No		No	No		No	No	
Maximum Recall		No	No		No		No	No		No	No	
Pedestrian Recall		No	No		No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	L	C	C	L	C	C
C, Cycle Length [s]	61	61	61	61	61	61	61	61	61	61	61
L, Total Lost Time per Cycle [s]	4.20	4.20	4.00	4.00	4.00	4.00	4.60	4.60	4.00	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20	0.00	2.00	2.00	2.00	2.60	2.60	2.00	2.60	2.60
g_i, Effective Green Time [s]	5	5	31	7	7	2	10	10	22	30	30
g / C, Green / Cycle	0.08	0.08	0.50	0.12	0.12	0.03	0.17	0.17	0.36	0.49	0.49
(v / s)_i Volume / Saturation Flow Rate	0.02	0.03	0.21	0.09	0.05	0.01	0.12	0.13	0.31	0.13	0.13
s, saturation flow rate [veh/h]	1781	1870	1589	1781	1819	1781	1870	1809	1781	1870	1798
c, Capacity [veh/h]	145	152	802	218	222	51	315	305	633	926	891
d1, Uniform Delay [s]	26.63	26.73	9.59	25.96	24.84	29.47	24.31	24.34	18.52	9.06	9.06
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.18	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.13	1.33	0.35	4.20	1.02	7.25	3.38	3.60	6.31	0.16	0.16
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.30	0.34	0.42	0.71	0.37	0.49	0.74	0.74	0.87	0.27	0.27
d, Delay for Lane Group [s/veh]	27.76	28.06	9.95	30.16	25.86	36.72	27.69	27.93	24.83	9.22	9.23
Lane Group LOS	C	C	A	C	C	D	C	C	C	A	A
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.61	0.74	2.48	2.29	1.10	0.44	3.24	3.18	7.41	1.65	1.59
50th-Percentile Queue Length [ft/ln]	15.24	18.52	61.99	57.36	27.56	11.09	80.95	79.46	185.28	41.21	39.67
95th-Percentile Queue Length [veh/ln]	1.10	1.33	4.46	4.13	1.98	0.80	5.83	5.72	11.88	2.97	2.86
95th-Percentile Queue Length [ft/ln]	27.43	33.33	111.58	103.25	49.61	19.97	145.71	143.03	296.89	74.17	71.41

Movement, Approach, & Intersection Results

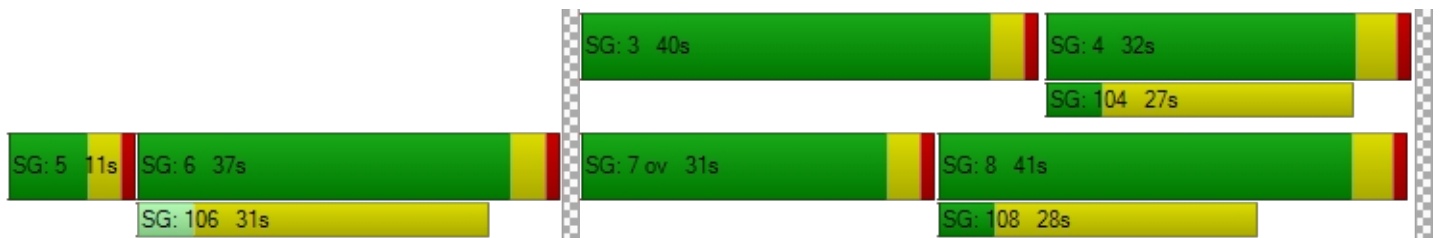
d_M, Delay for Movement [s/veh]	27.76	28.06	9.95	30.16	25.86	25.86	36.72	27.80	27.93	24.83	9.22	9.23
Movement LOS	C	C	A	C	C	C	D	C	C	C	A	A
d_A, Approach Delay [s/veh]	13.88			28.67			28.27			17.44		
Approach LOS	B			C			C			B		
d_I, Intersection Delay [s/veh]	20.33											
Intersection LOS	C											
Intersection V/C	0.810											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	7.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	53.20	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.414	2.075	2.539	0.000
Crosswalk LOS	B	B	B	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	547	117	607	457
d_b, Bicycle Delay [s]	31.68	53.20	29.12	35.73
I_b,int, Bicycle LOS Score for Intersection	2.276	1.949	1.959	2.423
Bicycle LOS	B	A	A	B

Sequence

Ring 1	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 25: McCall Blvd @ I-215 SB

Control Type:	Signalized	Delay (sec / veh):	19.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.760

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	455.00	100.00	100.00	400.00	235.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name				I-215 SB			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	0	0	0	225	0	264	0	667	311	437	898	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	234	0	275	0	694	323	454	934	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9480	0.9480	0.9480	1.0000	0.9480	0.9480	0.9480	0.9480	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	62	0	73	0	183	85	120	246	0
Total Analysis Volume [veh/h]	0	0	0	247	0	290	0	732	341	479	985	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing in		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	5	0	0	5	0	5	5	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	3.2	0.0	0.0	3.6	0.0	3.0	3.6	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	39	0	0	41	0	40	81	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	24	0	0	21	0	0	15	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	2.2	0.0	0.0	2.6	0.0	2.0	2.6	0.0
Minimum Recall					No			No		No	No	
Maximum Recall					No			No		No	No	
Pedestrian Recall					No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		C	R	C	R	L	C
C, Cycle Length [s]		64	64	64	64	64	64
L, Total Lost Time per Cycle [s]		4.20	4.20	4.60	4.60	4.00	4.60
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		2.20	2.20	2.60	2.60	2.00	2.60
g_i, Effective Green Time [s]		15	15	18	18	20	41
g / C, Green / Cycle		0.23	0.23	0.27	0.27	0.30	0.64
(v / s)_i Volume / Saturation Flow Rate		0.14	0.18	0.21	0.21	0.27	0.28
s, saturation flow rate [veh/h]		1781	1589	3560	1589	1781	3560
c, Capacity [veh/h]		401	358	971	433	541	2273
d1, Uniform Delay [s]		22.50	23.71	21.51	21.76	21.40	5.84
k, delay calibration		0.11	0.11	0.11	0.11	0.14	0.11
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		1.54	4.40	1.22	3.21	6.44	0.13
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.62	0.81	0.75	0.79	0.88	0.43
d, Delay for Lane Group [s/veh]		24.04	28.11	22.73	24.97	27.84	5.97
Lane Group LOS		C	C	C	C	C	A
Critical Lane Group		No	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]		3.32	4.34	4.73	4.69	7.10	2.33
50th-Percentile Queue Length [ft/ln]		83.08	108.41	118.32	117.29	177.47	58.32
95th-Percentile Queue Length [veh/ln]		5.98	7.75	8.30	8.24	11.47	4.20
95th-Percentile Queue Length [ft/ln]		149.55	193.78	207.52	206.10	286.70	104.98

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	24.04	24.04	28.11	0.00	22.73	24.97	27.84	5.97	0.00
Movement LOS				C	C	C		C	C	C	A	
d_A, Approach Delay [s/veh]	0.00			26.24			23.44			13.12		
Approach LOS	A			C			C			B		
d_I, Intersection Delay [s/veh]	19.01											
Intersection LOS	B											
Intersection V/C	0.760											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.238	0.000	0.000	0.000
Crosswalk LOS	B	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	580	607	1273
d_b, Bicycle Delay [s]	60.00	30.25	29.12	7.92
I_b,int, Bicycle LOS Score for Intersection	4.132	2.446	2.445	2.767
Bicycle LOS	D	B	B	C

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 26: McCall Blvd @ I-215 NB

Control Type:	Signalized	Delay (sec / veh):	21.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.792

Intersection Setup

Name	I-215 NB						McCall Blvd			McCall Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	240.00	100.00	100.00	100.00	250.00	100.00	100.00	100.00	100.00	320.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name	I-215 NB						McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	298	1	253	0	0	0	256	643	0	0	1032	393
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0000	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	310	1	263	0	0	0	266	669	0	0	1073	409
Peak Hour Factor	0.9100	0.9100	0.9100	1.0000	1.0000	1.0000	0.9100	0.9100	1.0000	1.0000	0.9100	0.9100
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	85	0	72	0	0	0	73	184	0	0	295	112
Total Analysis Volume [veh/h]	341	1	289	0	0	0	292	735	0	0	1179	449
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	0	0	5	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	0	0	0	5	5	0	0	5	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	3.2	0.0	0.0	0.0	0.0	3.0	3.6	0.0	0.0	3.6	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	16	0	0	0	0	15	44	0	0	29	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	3	0	0	0	0	0	17	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	0.0	0.0	2.0	2.6	0.0	0.0	2.6	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R		L	C	C	R
C, Cycle Length [s]	60	60		60	60	60	60
L, Total Lost Time per Cycle [s]	4.20	4.20		4.00	4.60	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20		2.00	2.60	2.60	2.60
g_i, Effective Green Time [s]	12	12		11	39	24	24
g / C, Green / Cycle	0.20	0.20		0.18	0.66	0.41	0.41
(v / s)_i Volume / Saturation Flow Rate	0.19	0.18		0.16	0.21	0.33	0.28
s, saturation flow rate [veh/h]	1781	1589		1781	3560	3560	1589
c, Capacity [veh/h]	353	315		329	2336	1442	644
d1, Uniform Delay [s]	24.02	23.72		23.98	4.49	15.96	14.88
k, delay calibration	0.11	0.11		0.11	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	16.22	10.78		8.03	0.35	5.25	6.16
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.97	0.92		0.89	0.31	0.82	0.70
d, Delay for Lane Group [s/veh]	40.24	34.50		32.01	4.85	21.21	21.04
Lane Group LOS	D	C		C	A	C	C
Critical Lane Group	Yes	No		Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	6.05	4.66		4.41	1.33	7.06	5.37
50th-Percentile Queue Length [ft/ln]	151.15	116.55		110.27	33.33	176.53	134.21
95th-Percentile Queue Length [veh/ln]	10.08	8.20		7.86	2.40	11.42	9.17
95th-Percentile Queue Length [ft/ln]	251.96	205.07		196.38	59.99	285.47	229.21

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	40.24	40.24	34.50	0.00	0.00	0.00	32.01	4.85	0.00	0.00	21.21	21.04
Movement LOS	D	D	C				C	A			C	C
d_A, Approach Delay [s/veh]	37.61			0.00			12.57			21.16		
Approach LOS	D			A			B			C		
d_I, Intersection Delay [s/veh]	21.63											
Intersection LOS	C											
Intersection V/C	0.792											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.003	0.000	0.000	0.000
Crosswalk LOS	B	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	393	0	1313	813
d_b, Bicycle Delay [s]	19.36	30.00	3.54	10.56
I_b,int, Bicycle LOS Score for Intersection	2.601	4.132	2.407	2.903
Bicycle LOS	B	D	B	C

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 27: McCall Blvd @ Encanto Dr

Control Type:	Signalized	Delay (sec / veh):	27.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.761

Intersection Setup

Name	Encanto Dr			Encanto Dr			McCall Blvd			McCall Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	130.00	100.00	130.00	80.00	100.00	100.00	100.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Encanto Dr			Encanto Dr			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	220	22	66	57	18	132	141	662	91	58	1074	57
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	229	23	69	59	19	137	147	688	95	60	1117	59
Peak Hour Factor	0.9240	0.9240	0.9240	0.9240	0.9240	0.9240	0.9240	0.9240	0.9240	0.9240	0.9240	0.9240
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	62	6	19	16	5	37	40	186	26	16	302	16
Total Analysis Volume [veh/h]	248	25	75	64	21	148	159	745	103	65	1209	64
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.2	0.0	0.0	3.2	0.0	3.0	3.6	0.0	3.0	3.6	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	31	0	0	31	0	9	20	0	9	20	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	17	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	2.2	0.0	2.0	2.6	0.0	2.0	2.6	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	L	C	C	L	C	C
C, Cycle Length [s]	74	74	74	74	74	74	74	74	74	74	74
L, Total Lost Time per Cycle [s]	4.20	4.20	4.20	4.20	4.20	4.00	4.60	4.60	4.00	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20	2.20	2.20	2.20	2.00	2.60	2.60	2.00	2.60	2.60
g_i, Effective Green Time [s]	25	25	25	25	25	8	32	32	4	28	28
g / C, Green / Cycle	0.34	0.34	0.34	0.34	0.34	0.11	0.44	0.44	0.05	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.20	0.01	0.05	0.05	0.10	0.09	0.23	0.23	0.04	0.34	0.34
s, saturation flow rate [veh/h]	1216	1870	1589	1386	1620	1781	1870	1792	1781	1870	1837
c, Capacity [veh/h]	381	629	535	515	545	203	823	789	89	704	691
d1, Uniform Delay [s]	27.29	16.48	17.07	18.89	18.16	31.81	15.05	15.05	34.57	21.86	21.89
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.13	0.13	0.11	0.32	0.33
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.89	0.03	0.12	0.11	0.32	6.45	0.62	0.64	10.72	12.94	13.41
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.65	0.04	0.14	0.12	0.31	0.78	0.53	0.53	0.73	0.91	0.91
d, Delay for Lane Group [s/veh]	29.18	16.51	17.19	19.00	18.48	38.25	15.67	15.70	45.29	34.81	35.30
Lane Group LOS	C	B	B	B	B	D	B	B	D	C	D
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.20	0.28	0.86	0.78	2.07	2.99	4.84	4.65	1.37	11.95	11.87
50th-Percentile Queue Length [ft/ln]	104.92	6.90	21.52	19.55	51.74	74.66	121.07	116.15	34.19	298.82	296.68
95th-Percentile Queue Length [veh/ln]	7.55	0.50	1.55	1.41	3.73	5.38	8.45	8.18	2.46	17.62	17.52
95th-Percentile Queue Length [ft/ln]	188.85	12.41	38.73	35.19	93.13	134.39	211.30	204.52	61.54	440.56	437.92

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	29.18	16.51	17.19	19.00	18.48	18.48	38.25	15.68	15.70	45.29	35.04	35.30
Movement LOS	C	B	B	B	B	B	D	B	B	D	D	D
d_A, Approach Delay [s/veh]	25.68			18.62			19.25			35.55		
Approach LOS	C			B			B			D		
d_I, Intersection Delay [s/veh]	27.42											
Intersection LOS	C											
Intersection V/C	0.761											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	21.68	0.00	21.68
I_p,int, Pedestrian LOS Score for Intersection	2.243	2.077	0.000	2.877
Crosswalk LOS	B	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	893	893	513	513
d_b, Bicycle Delay [s]	9.19	9.19	16.58	16.58
I_b,int, Bicycle LOS Score for Intersection	2.134	1.944	2.390	2.663
Bicycle LOS	B	A	B	B

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Menifee Commerce Center

Vistro File: H:\...19-239 Menifee Commerce Center
100k.vistro

Scenario 2 Existing PM (2021)

Report File: H:\...LOS - 1 Existing PM.pdf

2021-08-12

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Case Rd/Bonnie Dr @ I-215 SB	Signalized	HCM 6th Edition	NB Left	0.778	26.3	C
2	SR-74 @ I-215 NB	Signalized	HCM 6th Edition	SEB Left	0.478	8.5	A
3	SR-74 @ Trumble Rd	Signalized	HCM 6th Edition	SWB Right	0.841	31.5	C
4	SR-74 @ Sherman Rd	Signalized	HCM 6th Edition	SB Right	0.703	16.6	B
5	Ethanac Rd @ Murrieta Rd	Signalized	HCM 6th Edition	EB Left	0.649	22.7	C
6	Ethanac Rd @ Case Rd/Barnett Rd	Signalized	HCM 6th Edition	NB Right	0.743	23.9	C
7	Ethanac Rd @ I-215 SB	Signalized	HCM 6th Edition	WB Left	0.648	17.6	B
8	Ethanac Rd @ I-215 NB	Signalized	HCM 6th Edition	NB Left	0.817	38.8	D
9	Ethanac Rd @ Encanto Dr	Two-way stop	HCM 6th Edition	NB Left	0.600	54.8	F
10	Ethanac Rd @ Trumble Rd	Signalized	HCM 6th Edition	WB Left	0.508	14.1	B
11	Ethanac Rd @ Sherman Rd	Two-way stop	HCM 6th Edition	NB Left	0.135	32.3	D
12	Ethanac Rd @ Dawson Rd	Two-way stop	HCM 6th Edition	NB Right	0.002	10.7	B
13	Ethanac Rd @ Antelope Rd	Two-way stop	HCM 6th Edition	NB Left	0.096	15.2	C
14	SR-74 @ Palomar Rd	Signalized	HCM 6th Edition	WB Left	0.686	13.0	B
15	SR-74 @ Menifee Rd	Signalized	HCM 6th Edition	NB Right	0.971	72.5	E
16	SR-74 @ Briggs Rd	Signalized	HCM 6th Edition	WB Left	0.569	23.3	C
17	Matthews Rd @ Palomar Rd	Two-way stop	HCM 6th Edition	SB Left	0.121	17.1	C
	McLaughlin Rd @ Murrieta		HCM 6th				

18	McLaughlin Rd @ Murrieta Rd	Two-way stop	HCM 6th Edition	EB Left	0.024	22.9	C
19	McLaughlin Rd @ Encanto Dr	Two-way stop	HCM 6th Edition	WB Left	0.021	11.0	B
20	McLaughlin Rd @ Trumble Rd	All-way stop	HCM 6th Edition	NB Left	0.045	7.0	A
21	McLaughlin Rd @ Sherman Rd	Two-way stop	HCM 6th Edition	EB Thru	0.002	9.2	A
22	Rouse Rd @ Murrieta Rd	Two-way stop	HCM 6th Edition	EB Left	0.077	23.8	C
23	Rouse Rd @ Encanto Dr	Two-way stop	HCM 6th Edition	WB Left	0.060	10.9	B
24	McCall Blvd @ Bradley Rd	Signalized	HCM 6th Edition	SB Left	0.977	47.0	D
25	McCall Blvd @ I-215 SB	Signalized	HCM 6th Edition	SB Right	0.863	30.1	C
26	McCall Blvd @ I-215 NB	Signalized	HCM 6th Edition	EB Left	0.751	19.8	B
27	McCall Blvd @ Encanto Dr	Signalized	HCM 6th Edition	WB Left	0.673	16.5	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Case Rd/Bonnie Dr @ I-215 SB

Control Type:	Signalized	Delay (sec / veh):	26.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.778

Intersection Setup

Name	Case Rd		I-215 SB		Bonnie Dr	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration	↵		↵		↵	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1
Entry Pocket Length [ft]	115.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Case Rd		I-215 SB		Bonnie Dr	
Base Volume Input [veh/h]	238	336	899	26	25	317
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	248	349	935	27	26	330
Peak Hour Factor	0.9340	0.9340	0.9340	0.9340	0.9340	0.9340
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	66	93	250	7	7	88
Total Analysis Volume [veh/h]	266	374	1001	29	28	353
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing in	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Version 2020 (SP 0-8)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Overlap	Split	Overlap
Signal Group	1	6	2	2	3	3
Auxiliary Signal Groups				1,2,3,6		1,2,3,6
Lead / Lag	Lag	-	-	-	Lead	-
Minimum Green [s]	5	5	5	5	5	5
Maximum Green [s]	30	30	30	30	30	30
Amber [s]	3.0	4.3	4.3	4.3	4.3	4.3
All red [s]	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	21	101	80	80	21	21
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	5	5	5	5	5
Pedestrian Clearance [s]	0	17	7	7	10	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	3.3	3.3	3.3	3.3	3.3
Minimum Recall	No	No	No	No	No	No
Maximum Recall	No	No	No	No	No	No
Pedestrian Recall	No	No	No	No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	R
C, Cycle Length [s]	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	5.30	5.30	5.30	5.30	5.30
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	3.30	3.30	0.00	3.30	0.00
g_i, Effective Green Time [s]	17	104	83	194	5	194
g / C, Green / Cycle	0.14	0.87	0.69	1.62	0.04	1.62
(v / s)_i Volume / Saturation Flow Rate	0.19	0.20	0.54	0.02	0.02	0.22
s, saturation flow rate [veh/h]	1417	1870	1870	1589	1781	1589
c, Capacity [veh/h]	239	1626	1298	2570	75	2570
d1, Uniform Delay [s]	54.33	1.28	12.06	0.00	55.93	0.00
k, delay calibration	0.27	0.50	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	77.83	0.33	4.47	0.01	3.07	0.11
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	0.59	1.00	0.59
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.12	0.23	0.77	0.01	0.37	0.14
d, Delay for Lane Group [s/veh]	132.16	1.61	16.53	0.01	58.99	0.11
Lane Group LOS	F	A	B	A	E	A
Critical Lane Group	Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	12.26	0.51	15.85	0.01	0.87	0.08
50th-Percentile Queue Length [ft/ln]	306.44	12.78	396.35	0.14	21.77	1.99
95th-Percentile Queue Length [veh/ln]	18.89	0.92	22.38	0.01	1.57	0.14
95th-Percentile Queue Length [ft/ln]	472.33	23.01	559.60	0.26	39.19	3.58

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	132.16	1.61	16.53	0.01	58.99	0.11
Movement LOS	F	A	B	A	E	A
d_A, Approach Delay [s/veh]	55.87		16.07		4.44	
Approach LOS	E		B		A	
d_I, Intersection Delay [s/veh]	26.33					
Intersection LOS	C					
Intersection V/C	0.778					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	2.875	2.654	2.663
Crosswalk LOS	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1595	1245	262
d_b, Bicycle Delay [s]	2.46	8.55	45.33
I_b,int, Bicycle LOS Score for Intersection	2.616	3.259	1.560
Bicycle LOS	B	C	A

Sequence




Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: SR-74 @ I-215 NB

Control Type:	Signalized	Delay (sec / veh):	8.5
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.478

Intersection Setup

Name	I-215 NB		SR-74		Case Rd	
Approach	Southbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	150.00	245.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	I-215 NB		SR-74		Case Rd	
Base Volume Input [veh/h]	272	32	509	791	8	1186
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	283	33	529	823	8	1233
Peak Hour Factor	0.9390	0.9390	0.9390	0.9390	0.9390	0.9390
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	75	9	141	219	2	328
Total Analysis Volume [veh/h]	301	35	563	876	9	1313
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing in	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Permissive	Overlap	Protected	Permissive
Signal Group	7	0	6	6	5	2
Auxiliary Signal Groups				2,5,6,7		
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	5	5	5	5
Maximum Green [s]	30	0	30	30	30	30
Amber [s]	4.3	0.0	4.3	4.3	3.0	4.3
All red [s]	1.0	0.0	1.0	1.0	1.0	1.0
Split [s]	12	0	19	19	29	48
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	3.0
Walk [s]	0	0	5	5	0	5
Pedestrian Clearance [s]	0	0	10	10	0	14
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	3.3	0.0	3.3	3.3	2.0	3.3
Minimum Recall	No		No	No	No	No
Maximum Recall	No		No	No	No	No
Pedestrian Recall	No		No	No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C
C, Cycle Length [s]	49	49	49	49	49
L, Total Lost Time per Cycle [s]	5.30	5.30	4.87	4.00	5.30
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	3.30	3.30	0.00	2.00	3.30
g_i, Effective Green Time [s]	14	19	62	1	24
g / C, Green / Cycle	0.29	0.40	1.26	0.01	0.49
(v / s)_i Volume / Saturation Flow Rate	0.19	0.16	0.55	0.01	0.37
s, saturation flow rate [veh/h]	1759	3560	1589	1417	3560
c, Capacity [veh/h]	514	1408	2004	148	1752
d1, Uniform Delay [s]	15.21	10.67	0.00	24.57	10.05
k, delay calibration	0.11	0.11	0.35	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.41	0.18	0.49	0.17	0.66
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	0.83	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.65	0.40	0.44	0.06	0.75
d, Delay for Lane Group [s/veh]	16.62	10.85	0.49	24.74	10.71
Lane Group LOS	B	B	A	C	B
Critical Lane Group	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.72	1.59	0.27	0.10	3.64
50th-Percentile Queue Length [ft/ln]	68.05	39.86	6.85	2.45	91.12
95th-Percentile Queue Length [veh/ln]	4.90	2.87	0.49	0.18	6.56
95th-Percentile Queue Length [ft/ln]	122.50	71.75	12.33	4.41	164.01

Movement, Approach, & Intersection Results

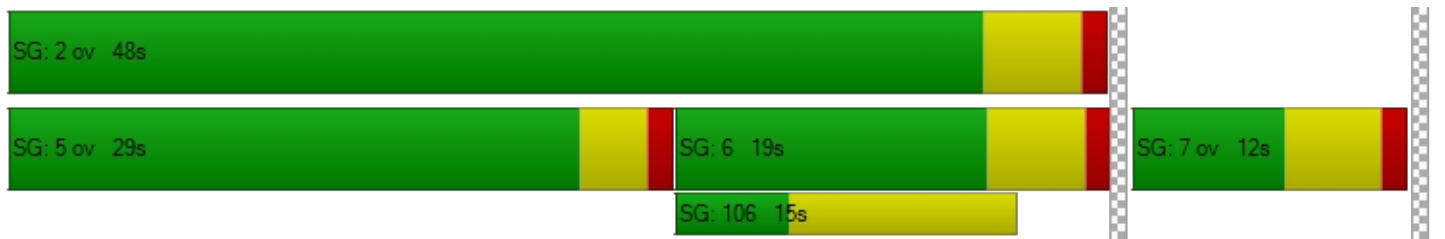
d_M, Delay for Movement [s/veh]	16.62	16.62	10.85	0.49	24.74	10.71
Movement LOS	B	B	B	A	C	B
d_A, Approach Delay [s/veh]	16.62		4.55		10.80	
Approach LOS	B		A		B	
d_I, Intersection Delay [s/veh]	8.53					
Intersection LOS	A					
Intersection V/C	0.478					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	6.7	6.7
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	23.67	23.67
I_p,int, Pedestrian LOS Score for Intersection	2.601	3.177	2.846
Crosswalk LOS	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	223	457	1423
d_b, Bicycle Delay [s]	23.67	17.86	2.49
I_b,int, Bicycle LOS Score for Intersection	2.114	2.747	2.650
Bicycle LOS	B	B	B

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: SR-74 @ Trumble Rd

Control Type:	Signalized	Delay (sec / veh):	31.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.841

Intersection Setup

Name	Trumble		SR-74		SR-74	
Approach	Southwestbound		Northwestbound		Southeastbound	
Lane Configuration	⇐⇐		⇑⇑		⇐⇑⇑	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	255.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		Yes	

Volumes

Name	Trumble		SR-74		SR-74	
Base Volume Input [veh/h]	95	415	924	73	343	1127
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	99	432	961	76	357	1172
Peak Hour Factor	0.9890	0.9890	0.9890	0.9890	0.9890	0.9890
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	25	109	243	19	90	296
Total Analysis Volume [veh/h]	100	437	972	77	361	1185
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing in	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Protected	Permissive
Signal Group	7	0	6	0	5	2
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	5	0	5	5
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	4.3	0.0	4.3	0.0	3.0	4.3
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	21	0	21	0	18	39
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	10	0	10	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	3.3	0.0	3.3	0.0	2.0	3.3
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C	L	C
C, Cycle Length [s]	89	89	89	89	89	89
L, Total Lost Time per Cycle [s]	5.30	5.30	5.30	5.30	4.00	5.30
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.30	3.30	3.30	3.30	2.00	3.30
g_i, Effective Green Time [s]	26	26	28	28	20	52
g / C, Green / Cycle	0.30	0.30	0.31	0.31	0.23	0.58
(v / s)_i Volume / Saturation Flow Rate	0.06	0.27	0.28	0.29	0.20	0.33
s, saturation flow rate [veh/h]	1781	1589	1870	1823	1781	3560
c, Capacity [veh/h]	528	472	584	569	403	2078
d1, Uniform Delay [s]	23.22	30.22	29.11	29.41	33.27	11.51
k, delay calibration	0.11	0.29	0.30	0.32	0.16	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.17	18.07	12.77	16.08	9.93	0.25
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.19	0.93	0.90	0.92	0.90	0.57
d, Delay for Lane Group [s/veh]	23.39	48.30	41.88	45.48	43.20	11.75
Lane Group LOS	C	D	D	D	D	B
Critical Lane Group	No	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	1.48	10.66	11.82	12.39	8.13	6.01
50th-Percentile Queue Length [ft/ln]	37.07	266.49	295.49	309.74	203.16	150.27
95th-Percentile Queue Length [veh/ln]	2.67	16.01	17.46	18.16	12.80	10.03
95th-Percentile Queue Length [ft/ln]	66.73	400.35	436.44	454.06	320.03	250.79

Movement, Approach, & Intersection Results

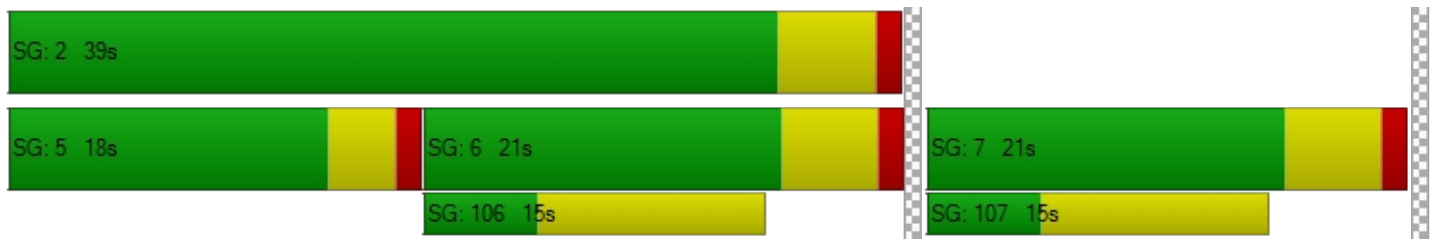
d_M, Delay for Movement [s/veh]	23.39	48.30	43.54	45.48	43.20	11.75
Movement LOS	C	D	D	D	D	B
d_A, Approach Delay [s/veh]	43.66		43.68		19.10	
Approach LOS	D		D		B	
d_I, Intersection Delay [s/veh]	31.54					
Intersection LOS	C					
Intersection V/C	0.841					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	21.68
I_p,int, Pedestrian LOS Score for Intersection	2.396	0.000	3.145
Crosswalk LOS	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	523	523	1123
d_b, Bicycle Delay [s]	16.35	16.35	5.76
I_b,int, Bicycle LOS Score for Intersection	1.560	2.425	2.835
Bicycle LOS	A	B	C

Sequence





Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: SR-74 @ Sherman Rd

Control Type:	Signalized	Delay (sec / veh):	16.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.703

Intersection Setup

Name	Sherman Rd			Sherman Rd			SR-74			SR-74		
Approach	Southbound			Northeastbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	120.00	185.00	100.00	100.00	270.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			40.00			30.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Sherman Rd			Sherman Rd			SR-74			SR-74		
Base Volume Input [veh/h]	23	5	52	27	16	115	87	940	26	16	1182	31
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	24	5	54	28	17	120	90	978	27	17	1229	32
Peak Hour Factor	0.9500	0.9290	0.9290	0.9290	0.9290	0.9500	0.9500	0.9500	0.9500	0.9290	0.9500	0.9290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	1	15	8	5	32	24	257	7	5	323	9
Total Analysis Volume [veh/h]	25	5	58	30	18	126	95	1029	28	18	1294	34
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	2	0	0	1	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.2	0.0	3.0	4.3	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	10	0	0	19	0	10	20	0	11	21	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.2	0.0	2.0	3.3	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	53	53	53	53	53	53	53	53	53
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.20	4.20	4.00	5.30	5.30
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.20	2.20	2.00	3.30	3.30
g_i, Effective Green Time [s]	4	6	6	4	26	26	1	22	22
g / C, Green / Cycle	0.07	0.11	0.11	0.07	0.49	0.49	0.02	0.42	0.42
(v / s)_i Volume / Saturation Flow Rate	0.05	0.03	0.08	0.05	0.28	0.28	0.01	0.36	0.36
s, saturation flow rate [veh/h]	1654	1813	1589	1781	1870	1853	1781	1870	1853
c, Capacity [veh/h]	114	205	180	128	914	906	40	783	776
d1, Uniform Delay [s]	24.17	21.34	22.56	24.04	9.63	9.63	25.51	13.87	13.88
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.16	0.16
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	10.36	0.58	4.89	8.30	0.59	0.59	7.97	3.96	4.04
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.77	0.23	0.70	0.74	0.58	0.58	0.46	0.85	0.85
d, Delay for Lane Group [s/veh]	34.53	21.91	27.45	32.35	10.22	10.23	33.48	17.83	17.92
Lane Group LOS	C	C	C	C	B	B	C	B	B
Critical Lane Group	Yes	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.35	0.51	1.56	1.37	3.56	3.53	0.28	5.99	5.96
50th-Percentile Queue Length [ft/ln]	33.72	12.72	39.12	34.22	89.03	88.28	7.08	149.74	149.09
95th-Percentile Queue Length [veh/ln]	2.43	0.92	2.82	2.46	6.41	6.36	0.51	10.00	9.97
95th-Percentile Queue Length [ft/ln]	60.69	22.89	70.41	61.59	160.26	158.90	12.74	250.08	249.21

Movement, Approach, & Intersection Results

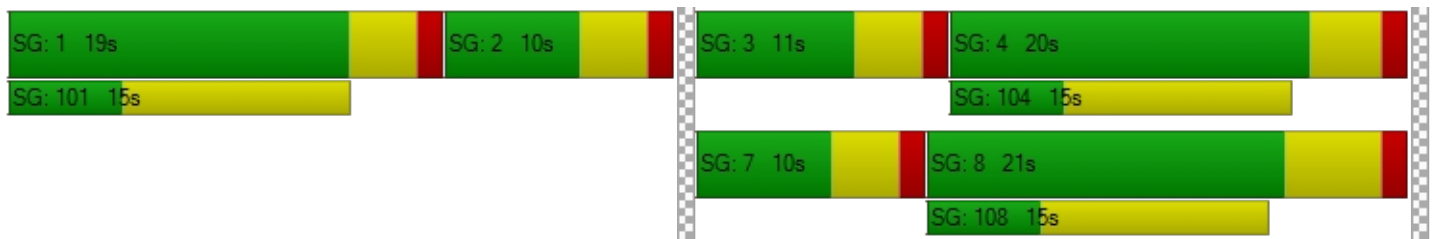
d_M, Delay for Movement [s/veh]	34.53	34.53	34.53	21.91	21.91	27.45	32.35	10.22	10.23	33.48	17.88	17.92
Movement LOS	C	C	C	C	C	C	C	B	B	C	B	B
d_A, Approach Delay [s/veh]	34.53			25.92			12.05			18.09		
Approach LOS	C			C			B			B		
d_I, Intersection Delay [s/veh]	16.58											
Intersection LOS	B											
Intersection V/C	0.703											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	21.68	21.68	0.00
I_p,int, Pedestrian LOS Score for Intersection	1.757	2.054	2.787	0.000
Crosswalk LOS	A	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	200	500	527	523
d_b, Bicycle Delay [s]	24.30	16.88	16.28	16.35
I_b,int, Bicycle LOS Score for Intersection	1.705	1.847	2.510	2.670
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Ethanac Rd @ Murrieta Rd

Control Type:	Signalized	Delay (sec / veh):	22.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.649

Intersection Setup

Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	200.00	100.00	100.00	315.00	100.00	100.00	200.00	100.00	100.00	200.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			No		

Volumes

Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	92	87	177	18	124	8	2	323	103	227	405	8
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	96	90	184	19	129	8	2	336	107	236	421	8
Peak Hour Factor	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560	0.9560
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	25	24	48	5	34	2	1	88	28	62	110	2
Total Analysis Volume [veh/h]	100	94	192	20	135	8	2	351	112	247	440	8
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	1	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	4.3	0.0	3.0	4.7	0.0	3.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	21	0	0	24	0	21	23	0	22	24	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	3.3	0.0	2.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	57	57	57	57	57	57	57	57	57	57	57
L, Total Lost Time per Cycle [s]	4.00	4.00	5.30	5.30	5.30	4.00	5.70	5.70	4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	3.30	3.30	3.30	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	12	12	6	6	6	0	10	10	10	20	20
g / C, Green / Cycle	0.21	0.21	0.10	0.10	0.10	0.00	0.18	0.18	0.17	0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.06	0.17	0.01	0.07	0.01	0.00	0.13	0.13	0.14	0.12	0.12
s, saturation flow rate [veh/h]	1781	1672	1781	1870	1589	1781	1870	1719	1781	1870	1858
c, Capacity [veh/h]	381	357	183	192	163	5	331	304	311	653	649
d1, Uniform Delay [s]	18.77	21.37	23.33	24.86	23.19	28.53	22.25	22.32	22.66	13.80	13.80
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.36	4.16	0.26	4.60	0.12	45.43	2.96	3.48	4.58	0.31	0.31
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.26	0.80	0.11	0.70	0.05	0.40	0.72	0.74	0.79	0.34	0.34
d, Delay for Lane Group [s/veh]	19.13	25.53	23.59	29.47	23.31	73.96	25.21	25.80	27.24	14.11	14.12
Lane Group LOS	B	C	C	C	C	E	C	C	C	B	B
Critical Lane Group	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.98	3.49	0.23	1.80	0.09	0.09	2.81	2.69	3.07	1.73	1.72
50th-Percentile Queue Length [ft/ln]	24.59	87.29	5.73	45.01	2.29	2.17	70.26	67.17	76.68	43.22	42.98
95th-Percentile Queue Length [veh/ln]	1.77	6.28	0.41	3.24	0.16	0.16	5.06	4.84	5.52	3.11	3.09
95th-Percentile Queue Length [ft/ln]	44.27	157.12	10.32	81.02	4.12	3.90	126.46	120.91	138.03	77.80	77.37

Movement, Approach, & Intersection Results

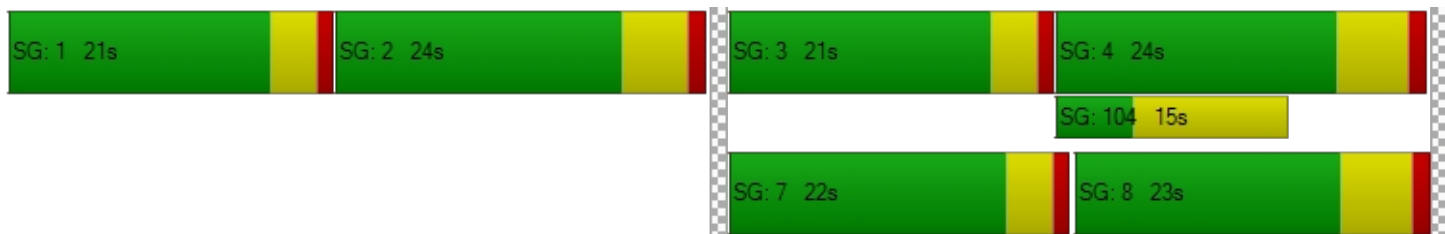
d_M, Delay for Movement [s/veh]	19.13	25.53	25.53	23.59	29.47	23.31	73.96	25.39	25.80	27.24	14.11	14.12
Movement LOS	B	C	C	C	C	C	E	C	C	C	B	B
d_A, Approach Delay [s/veh]	23.87			28.45			25.70			18.78		
Approach LOS	C			C			C			B		
d_I, Intersection Delay [s/veh]	22.74											
Intersection LOS	C											
Intersection V/C	0.649											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			9.0			0.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	0.00			36.45			0.00			0.00		
I_p,int, Pedestrian LOS Score for Intersection	0.000			2.230			0.000			0.000		
Crosswalk LOS	F			B			F			F		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	378			416			384			407		
d_b, Bicycle Delay [s]	29.61			28.24			29.36			28.56		
I_b,int, Bicycle LOS Score for Intersection	2.197			1.829			1.943			2.133		
Bicycle LOS	B			A			A			B		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Ethanac Rd @ Case Rd/Barnett Rd

Control Type:	Signalized	Delay (sec / veh):	23.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.743

Intersection Setup

Name	Barnett Rd			Case Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			← → ← →			← →			← →		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	230.00	100.00	120.00	150.00	100.00	100.00	110.00	100.00	270.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			40.00			30.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Barnett Rd			Case Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	16	4	54	494	0	145	148	501	17	53	461	478
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0000	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	17	4	56	514	0	151	154	521	18	55	479	497
Peak Hour Factor	0.9700	0.9700	0.9700	0.9700	1.0000	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	1	14	132	0	39	40	134	5	14	123	128
Total Analysis Volume [veh/h]	18	4	58	530	0	156	159	537	19	57	494	512
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Permiss	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	7	0	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	0	5	0	5	0	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	30	0	0	30	30	0	30	30	0
Amber [s]	0.0	3.2	0.0	3.0	0.0	0.0	3.0	3.2	0.0	3.0	4.7	0.0
All red [s]	0.0	1.0	0.0	1.0	0.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	10	0	34	0	0	9	30	0	16	37	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	0.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	5	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	10	0	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No		No				No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	0.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	2.0	0.0	0.0	2.0	2.2	0.0	2.0	3.7	0.0
Minimum Recall		No		No			No	No		No	No	
Maximum Recall		No		No			No	No		No	No	
Pedestrian Recall		No		No			No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	R	L	C	R	L	C	R
C, Cycle Length [s]	69	69	69	69	69	69	69	69	69
L, Total Lost Time per Cycle [s]	4.20	4.00	4.00	4.00	4.20	4.20	4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.00	2.00	2.00	2.20	2.20	2.00	3.70	3.70
g_i, Effective Green Time [s]	4	14	14	8	31	31	3	25	25
g / C, Green / Cycle	0.06	0.20	0.20	0.12	0.45	0.45	0.05	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.05	0.15	0.06	0.09	0.15	0.01	0.03	0.14	0.32
s, saturation flow rate [veh/h]	1641	3459	2813	1781	3560	1589	1781	3560	1589
c, Capacity [veh/h]	103	698	567	206	1601	715	86	1285	574
d1, Uniform Delay [s]	31.90	26.00	23.31	29.67	12.32	10.59	32.32	16.38	20.81
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.23
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	11.72	1.73	0.26	6.07	0.12	0.01	8.35	0.19	10.08
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.78	0.76	0.27	0.77	0.34	0.03	0.66	0.38	0.89
d, Delay for Lane Group [s/veh]	43.62	27.73	23.57	35.75	12.44	10.60	40.67	16.57	30.90
Lane Group LOS	D	C	C	D	B	B	D	B	C
Critical Lane Group	Yes	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.60	3.91	1.01	2.80	2.45	0.15	1.05	2.46	7.99
50th-Percentile Queue Length [ft/ln]	40.05	97.67	25.18	70.00	61.20	3.75	26.23	61.40	199.64
95th-Percentile Queue Length [veh/ln]	2.88	7.03	1.81	5.04	4.41	0.27	1.89	4.42	12.62
95th-Percentile Queue Length [ft/ln]	72.10	175.81	45.32	126.00	110.15	6.76	47.22	110.51	315.50

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	43.62	43.62	43.62	27.73	0.00	23.57	35.75	12.44	10.60	40.67	16.57	30.90
Movement LOS	D	D	D	C		C	D	B	B	D	B	C
d_A, Approach Delay [s/veh]	43.62			26.79			17.57			24.76		
Approach LOS	D			C			B			C		
d_I, Intersection Delay [s/veh]	23.88											
Intersection LOS	C											
Intersection V/C	0.743											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	0.00
I_p,int, Pedestrian LOS Score for Intersection	1.792	2.655	2.679	0.000
Crosswalk LOS	A	B	B	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	129	667	573	696
d_b, Bicycle Delay [s]	39.39	20.00	22.90	19.14
I_b,int, Bicycle LOS Score for Intersection	1.692	1.560	2.149	2.437
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 7: Ethanac Rd @ I-215 SB

Control Type:	Signalized	Delay (sec / veh):	17.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.648

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	240.00	100.00	100.00	100.00	275.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			45.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name				I-215 SB			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	0	0	0	112	2	281	0	525	374	109	642	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0600	1.0600	1.0600	1.0000	1.0600	1.0600	1.0600	1.0600	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	119	2	298	0	557	396	116	681	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9580	0.9580	0.9580	1.0000	0.9580	0.9580	0.9580	0.9580	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	31	1	78	0	145	103	30	178	0
Total Analysis Volume [veh/h]	0	0	0	124	2	311	0	581	413	121	711	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	70
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	5	0	0	5	0	5	5	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	4.3	0.0	0.0	4.7	0.0	3.0	4.7	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	21	0	0	32	0	17	49	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	10	0	0	10	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	3.3	0.0	0.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall					No			No		No	No	
Maximum Recall					No			No		No	No	
Pedestrian Recall					No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		C	R	C	R	L	C
C, Cycle Length [s]		70	70	70	70	70	70
L, Total Lost Time per Cycle [s]		5.30	5.30	5.70	5.70	4.00	5.70
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		3.30	3.30	3.70	3.70	2.00	3.70
g_i, Effective Green Time [s]		15	15	33	33	6	44
g / C, Green / Cycle		0.22	0.22	0.48	0.48	0.09	0.62
(v / s)_i Volume / Saturation Flow Rate		0.07	0.20	0.31	0.26	0.07	0.20
s, saturation flow rate [veh/h]		1782	1589	1870	1589	1781	3560
c, Capacity [veh/h]		393	351	888	755	161	2217
d1, Uniform Delay [s]		22.93	26.49	14.02	13.06	31.12	6.24
k, delay calibration		0.11	0.11	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		0.47	7.59	3.74	2.84	6.82	0.38
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.32	0.89	0.65	0.55	0.75	0.32
d, Delay for Lane Group [s/veh]		23.39	34.08	17.76	15.90	37.93	6.62
Lane Group LOS		C	C	B	B	D	A
Critical Lane Group		No	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		1.63	5.23	6.32	4.17	2.11	1.69
50th-Percentile Queue Length [ft/ln]		40.65	130.78	158.02	104.21	52.82	42.31
95th-Percentile Queue Length [veh/ln]		2.93	8.98	10.44	7.50	3.80	3.05
95th-Percentile Queue Length [ft/ln]		73.17	224.55	261.09	187.58	95.08	76.15

Movement, Approach, & Intersection Results

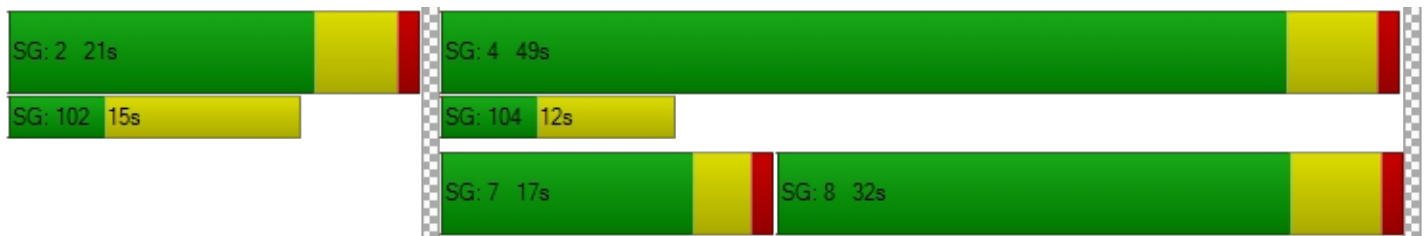
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	23.39	23.39	34.08	0.00	17.76	15.90	37.93	6.62	0.00
Movement LOS				C	C	C		B	B	D	A	
d_A, Approach Delay [s/veh]	0.00			31.00			16.99			11.18		
Approach LOS	A			C			B			B		
d_I, Intersection Delay [s/veh]	17.56											
Intersection LOS	B											
Intersection V/C	0.648											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	26.58	0.00	26.58
I_p,int, Pedestrian LOS Score for Intersection	0.000	2.023	0.000	2.744
Crosswalk LOS	F	B	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	449	751	1237
d_b, Bicycle Delay [s]	35.00	21.06	13.64	5.09
I_b,int, Bicycle LOS Score for Intersection	4.132	2.281	3.200	2.246
Bicycle LOS	D	B	C	B

Sequence





Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 8: Ethanac Rd @ I-215 NB

Control Type:	Signalized	Delay (sec / veh):	38.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.817

Intersection Setup

Name	I-215 NB			Ethanac Rd			Ethanac Rd					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	265.00	100.00	100.00	100.00	245.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name	I-215 NB						Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	388	2	187	0	0	0	228	417	0	0	357	147
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0000	1.0000	1.0000	1.0600	1.0600	1.0000	1.0000	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	411	2	198	0	0	0	242	442	0	0	378	156
Peak Hour Factor	0.9430	0.9430	0.9430	1.0000	1.0000	1.0000	0.9430	0.9430	1.0000	1.0000	0.9430	0.9430
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	109	1	52	0	0	0	64	117	0	0	100	41
Total Analysis Volume [veh/h]	436	2	210	0	0	0	257	469	0	0	401	165
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	0	0	0	5	5	0	0	5	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	3.2	0.0	0.0	0.0	0.0	3.0	4.7	0.0	0.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	17	0	0	0	0	16	43	0	0	27	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	7	0	0	0	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	0.0	0.0	2.0	3.7	0.0	0.0	3.7	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R		L	C	C
C, Cycle Length [s]	60	60		60	60	60
L, Total Lost Time per Cycle [s]	4.20	4.20		4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20		2.00	3.70	3.70
g_i, Effective Green Time [s]	13	13		11	37	23
g / C, Green / Cycle	0.21	0.21		0.18	0.62	0.38
(v / s)_i Volume / Saturation Flow Rate	0.25	0.13		0.14	0.25	0.32
s, saturation flow rate [veh/h]	1781	1589		1781	1870	1778
c, Capacity [veh/h]	381	340		321	1162	667
d1, Uniform Delay [s]	23.65	21.42		23.63	5.75	17.24
k, delay calibration	0.11	0.11		0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	74.52	1.83		4.64	1.04	12.75
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.15	0.62		0.80	0.40	0.85
d, Delay for Lane Group [s/veh]	98.17	23.26		28.27	6.79	29.99
Lane Group LOS	F	C		C	A	C
Critical Lane Group	Yes	No		Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	12.85	2.65		3.39	1.92	7.86
50th-Percentile Queue Length [ft/ln]	321.18	66.27		84.72	47.89	196.54
95th-Percentile Queue Length [veh/ln]	20.08	4.77		6.10	3.45	12.46
95th-Percentile Queue Length [ft/ln]	501.90	119.29		152.49	86.21	311.50

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	98.17	98.17	23.26	0.00	0.00	0.00	28.27	6.79	0.00	0.00	29.99	29.99
Movement LOS	F	F	C				C	A			C	C
d_A, Approach Delay [s/veh]	73.89			0.00			14.40			29.99		
Approach LOS	E			A			B			C		
d_I, Intersection Delay [s/veh]	38.82											
Intersection LOS	D											
Intersection V/C	0.817											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.011	0.000	0.000	0.000
Crosswalk LOS	B	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	427	0	1243	710
d_b, Bicycle Delay [s]	18.57	30.00	4.29	12.48
I_b,int, Bicycle LOS Score for Intersection	2.629	4.132	2.758	2.494
Bicycle LOS	B	D	C	B

Sequence

Ring 1	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 9: Ethanac Rd @ Encanto Dr

Control Type:	Two-way stop	Delay (sec / veh):	54.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.600

Intersection Setup

Name	Encanto Dr		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Encanto Dr		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	115	78	468	126	50	380
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	122	83	496	134	53	403
Peak Hour Factor	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	32	22	130	35	14	106
Total Analysis Volume [veh/h]	128	87	520	140	56	422
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.60	0.17	0.01	0.00	0.06	0.00
d_M, Delay for Movement [s/veh]	54.80	45.03	0.00	0.00	9.13	0.00
Movement LOS	F	E	A	A	A	A
95th-Percentile Queue Length [veh/ln]	5.84	5.84	0.00	0.00	0.19	0.00
95th-Percentile Queue Length [ft/ln]	145.88	145.88	0.00	0.00	4.81	0.00
d_A, Approach Delay [s/veh]	50.85		0.00		1.07	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	8.46					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 10: Ethanac Rd @ Trumble Rd

Control Type:	Signalized	Delay (sec / veh):	14.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.508

Intersection Setup

Name	Trumble Rd			Trumble Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔			↔			↔↔			↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	85.00	100.00	100.00	100.00	100.00	100.00	155.00	100.00	100.00	110.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Trumble Rd			Trumble Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	4	0	4	13	0	108	73	488	7	4	325	13
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	0	4	14	0	114	77	517	7	4	345	14
Peak Hour Factor	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	1	4	0	30	20	137	2	1	91	4
Total Analysis Volume [veh/h]	4	0	4	15	0	121	81	547	7	4	365	15
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	0	5	5	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.2	0.0	3.0	3.2	0.0	3.0	4.7	0.0	3.0	4.7	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	19	20	0	10	11	0	9	21	0	9	21	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	5	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	10	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.2	0.0	2.0	2.2	0.0	2.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.20	4.00	4.20	4.00	5.70	5.70	4.00	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.20	2.00	2.20	2.00	3.70	3.70	2.00	3.70
g_i, Effective Green Time [s]	0	5	1	6	4	36	36	0	32
g / C, Green / Cycle	0.01	0.09	0.02	0.10	0.06	0.59	0.59	0.01	0.54
(v / s)_i Volume / Saturation Flow Rate	0.00	0.00	0.01	0.08	0.05	0.29	0.00	0.00	0.20
s, saturation flow rate [veh/h]	1781	1589	1781	1589	1781	1870	1589	1781	1857
c, Capacity [veh/h]	13	137	37	158	113	1101	936	13	990
d1, Uniform Delay [s]	29.77	25.24	29.16	26.47	27.71	7.20	5.12	29.78	8.27
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	12.17	0.09	6.99	7.48	8.23	1.60	0.01	12.51	1.13
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.30	0.03	0.41	0.77	0.72	0.50	0.01	0.31	0.38
d, Delay for Lane Group [s/veh]	41.94	25.33	36.15	33.94	35.94	8.81	5.13	42.29	9.40
Lane Group LOS	D	C	D	C	D	A	A	D	A
Critical Lane Group	Yes	No	No	Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.10	0.05	0.28	1.92	1.27	2.84	0.03	0.10	2.21
50th-Percentile Queue Length [ft/ln]	2.50	1.32	6.90	48.11	31.63	70.91	0.63	2.42	55.23
95th-Percentile Queue Length [veh/ln]	0.18	0.10	0.50	3.46	2.28	5.11	0.05	0.17	3.98
95th-Percentile Queue Length [ft/ln]	4.49	2.38	12.42	86.59	56.93	127.64	1.13	4.36	99.42

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	41.94	25.33	25.33	36.15	33.94	33.94	35.94	8.81	5.13	42.29	9.40	9.40
Movement LOS	D	C	C	D	C	C	D	A	A	D	A	A
d_A, Approach Delay [s/veh]	33.64			34.19			12.23			9.75		
Approach LOS	C			C			B			A		
d_I, Intersection Delay [s/veh]	14.12											
Intersection LOS	B											
Intersection V/C	0.508											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	21.68	0.00	21.68
I_p,int, Pedestrian LOS Score for Intersection	1.927	1.996	0.000	2.435
Crosswalk LOS	A	A	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	527	227	510	510
d_b, Bicycle Delay [s]	16.28	23.59	16.65	16.65
I_b,int, Bicycle LOS Score for Intersection	1.573	1.784	2.607	2.193
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 11: Ethanac Rd @ Sherman Rd

Control Type:	Two-way stop	Delay (sec / veh):	32.3
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.135

Intersection Setup

Name	Sherman Rd			Sherman Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Sherman Rd			Sherman Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	19	8	5	3	5	90	139	349	3	9	230	1
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	8	5	3	5	95	147	370	3	10	244	1
Peak Hour Factor	0.9420	0.9420	0.9420	0.9420	0.9420	0.9420	0.9420	0.9420	0.9420	0.9420	0.9420	0.9420
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	2	1	1	1	25	39	98	1	3	65	0
Total Analysis Volume [veh/h]	21	8	5	3	5	101	156	393	3	11	259	1
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.13	0.04	0.01	0.02	0.02	0.13	0.12	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	32.34	26.62	14.70	25.21	23.58	10.76	8.13	0.00	0.00	8.13	0.00	0.00
Movement LOS	D	D	B	D	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.64	0.64	0.64	0.61	0.61	0.61	0.41	0.41	0.41	0.03	0.03	0.03
95th-Percentile Queue Length [ft/ln]	16.07	16.07	16.07	15.20	15.20	15.20	10.16	10.16	10.16	0.72	0.72	0.72
d_A, Approach Delay [s/veh]	28.40			11.75			2.30			0.33		
Approach LOS	D			B			A			A		
d_I, Intersection Delay [s/veh]	3.73											
Intersection LOS	D											

Intersection Level Of Service Report
Intersection 12: Ethanac Rd @ Dawson Rd

Control Type:	Two-way stop	Delay (sec / veh):	10.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Dawson Rd		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Dawson Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	1	351	2	3	240
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1	372	2	3	254
Peak Hour Factor	0.8840	0.8840	0.8840	0.8840	0.8840	0.8840
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	105	1	1	72
Total Analysis Volume [veh/h]	0	1	421	2	3	287
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	14.10	10.71	0.00	0.00	8.18	0.00
Movement LOS	B	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.12	0.12	0.00	0.00	0.20	0.20
d_A, Approach Delay [s/veh]	10.71		0.00		0.08	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.05					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 13: Ethanac Rd @ Antelope Rd

Control Type:	Two-way stop	Delay (sec / veh):	15.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.096

Intersection Setup

Name	Antelope Rd			Ethanac Rd			Matthews Rd			Antelope Rd		
Approach	Northbound			Eastbound			Westbound			Southeastbound		
Lane Configuration	←			→			↑			↘		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	250.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			50.00			50.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Antelope Rd			Ethanac Rd			Matthews Rd			Antelope Rd		
Base Volume Input [veh/h]	33	0	15	1	304	13	7	207	8	14	0	0
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0000	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	34	0	16	1	316	14	7	215	8	15	0	0
Peak Hour Factor	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860	0.8860
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	0	5	0	89	4	2	61	2	4	0	0
Total Analysis Volume [veh/h]	38	0	18	1	357	16	8	243	9	17	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Free	Free	Stop
Flared Lane	No			No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No			No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.00	0.03	0.00	0.00	0.00	0.01	0.00	0.00	0.05	0.00	0.00
d_M, Delay for Movement [s/veh]	15.18	15.17	11.33	7.74	0.00	0.00	8.06	0.00	0.00	15.03	14.67	10.00
Movement LOS	C	C	B	A	A	A	A	A	A	C	B	B
95th-Percentile Queue Length [veh/ln]	0.41	0.41	0.41	0.00	0.00	0.00	0.02	0.02	0.02	0.14	0.14	0.14
95th-Percentile Queue Length [ft/ln]	10.35	10.35	10.35	0.06	0.06	0.00	0.51	0.51	0.51	3.54	3.54	3.54
d_A, Approach Delay [s/veh]	13.94			0.02			0.25			15.03		
Approach LOS	B			A			A			C		
d_I, Intersection Delay [s/veh]	1.57											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 14: SR-74 @ Palomar Rd

Control Type:	Signalized	Delay (sec / veh):	13.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.686

Intersection Setup

Name	Palomar Rd			Palomar Rd			SR-74			SR-74		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	200.00	100.00	200.00	190.00	100.00	100.00	240.00	100.00	100.00	230.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Palomar Rd			Palomar Rd			SR-74			SR-74		
Base Volume Input [veh/h]	30	66	160	15	38	22	42	1072	12	98	926	28
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	31	69	166	16	40	23	44	1115	12	102	963	29
Peak Hour Factor	0.9500	0.9610	0.9610	0.9610	0.9610	0.9500	0.9500	0.9500	0.9500	0.9610	0.9500	0.9610
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	18	43	4	10	6	12	293	3	27	253	8
Total Analysis Volume [veh/h]	33	72	173	17	42	24	46	1174	13	106	1014	30
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	4.3	0.0	0.0	4.3	0.0	3.0	4.3	0.0	3.0	4.3	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	30	0	0	30	0	30	30	0	30	30	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.3	0.0	0.0	3.3	0.0	2.0	3.3	0.0	2.0	3.3	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	41	41	41	41	41	41	41	41	41	41	41	41
L, Total Lost Time per Cycle [s]	5.30	5.30	5.30	5.30	5.30	5.30	4.00	5.30	5.30	4.00	5.30	5.30
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.30	3.30	3.30	3.30	3.30	3.30	2.00	3.30	3.30	2.00	3.30	3.30
g_i, Effective Green Time [s]	7	7	7	7	7	7	2	17	17	4	18	18
g / C, Green / Cycle	0.16	0.16	0.16	0.16	0.16	0.16	0.05	0.40	0.40	0.09	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.02	0.04	0.11	0.01	0.02	0.02	0.03	0.32	0.32	0.06	0.28	0.28
s, saturation flow rate [veh/h]	1335	1870	1589	1328	1870	1655	1781	1870	1863	1781	1870	1851
c, Capacity [veh/h]	305	302	257	282	302	267	90	749	746	153	815	807
d1, Uniform Delay [s]	17.26	15.16	16.35	17.70	14.84	14.87	19.18	10.92	10.92	18.41	9.16	9.16
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.15	0.40	3.08	0.09	0.16	0.20	4.48	1.96	1.97	5.52	0.86	0.87
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.11	0.24	0.67	0.06	0.11	0.12	0.51	0.79	0.79	0.69	0.64	0.64
d, Delay for Lane Group [s/veh]	17.42	15.56	19.43	17.79	15.00	15.07	23.66	12.88	12.89	23.93	10.02	10.03
Lane Group LOS	B	B	B	B	B	B	C	B	B	C	B	B
Critical Lane Group	No	No	Yes	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.24	0.49	1.40	0.13	0.22	0.22	0.46	3.30	3.29	1.01	2.32	2.30
50th-Percentile Queue Length [ft/ln]	6.07	12.19	34.90	3.18	5.48	5.42	11.45	82.57	82.34	25.37	57.93	57.42
95th-Percentile Queue Length [veh/ln]	0.44	0.88	2.51	0.23	0.39	0.39	0.82	5.95	5.93	1.83	4.17	4.13
95th-Percentile Queue Length [ft/ln]	10.92	21.95	62.83	5.72	9.87	9.76	20.60	148.63	148.21	45.67	104.28	103.36

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	17.42	15.56	19.43	17.79	15.01	15.07	23.66	12.89	12.89	23.93	10.02	10.03
Movement LOS	B	B	B	B	B	B	C	B	B	C	B	B
d_A, Approach Delay [s/veh]	18.19			15.60			13.29			11.30		
Approach LOS	B			B			B			B		
d_I, Intersection Delay [s/veh]	13.02											
Intersection LOS	B											
Intersection V/C	0.686											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.430	2.217	3.022	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	549	549	549	549
d_b, Bicycle Delay [s]	23.69	23.69	23.69	23.69
I_b,int, Bicycle LOS Score for Intersection	2.018	1.628	2.577	2.508
Bicycle LOS	B	A	B	B

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: SR-74 @ Menifee Rd

Control Type:	Signalized	Delay (sec / veh):	72.5
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.971

Intersection Setup

Name	Menifee Rd			Menifee Rd			SR-74			SR-74		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	350.00	100.00	100.00	350.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Menifee Rd			Menifee Rd			SR-74			SR-74		
Base Volume Input [veh/h]	82	158	283	101	175	20	45	1080	102	229	888	93
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	85	164	294	105	182	21	47	1123	106	238	924	97
Peak Hour Factor	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	22	43	76	27	47	5	12	292	28	62	240	25
Total Analysis Volume [veh/h]	88	170	306	109	189	22	49	1167	110	247	960	101
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Version 2020 (SP 0-8)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	1	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.9	0.0	0.0	3.9	0.0	3.0	4.7	0.0	3.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	22	0	0	21	0	9	40	0	17	48	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.9	0.0	0.0	2.9	0.0	2.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	100	100	100	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.90	4.90	4.90	4.00	5.70	5.70	4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.90	2.90	2.90	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	17	17	16	4	31	31	16	44	44
g / C, Green / Cycle	0.17	0.17	0.16	0.04	0.31	0.31	0.16	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.14	0.19	0.18	0.03	0.35	0.35	0.14	0.29	0.29
s, saturation flow rate [veh/h]	1839	1589	1817	1781	1870	1814	1781	1870	1808
c, Capacity [veh/h]	315	272	289	67	587	570	287	818	791
d1, Uniform Delay [s]	39.99	41.48	42.09	47.66	34.32	34.32	40.89	22.22	22.26
k, delay calibration	0.11	0.18	0.14	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.29	72.46	62.38	14.27	68.02	70.08	7.50	4.12	4.30
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.82	1.13	1.11	0.73	1.10	1.11	0.86	0.66	0.66
d, Delay for Lane Group [s/veh]	45.28	113.94	104.47	61.93	102.34	104.40	48.39	26.34	26.56
Lane Group LOS	D	F	F	E	F	F	D	C	C
Critical Lane Group	No	Yes	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	6.37	11.94	11.87	1.42	24.19	23.79	6.20	9.90	9.66
50th-Percentile Queue Length [ft/ln]	159.34	298.45	296.74	35.54	604.66	594.73	154.93	247.50	241.55
95th-Percentile Queue Length [veh/ln]	10.51	18.60	18.37	2.56	34.30	33.88	10.28	15.06	14.76
95th-Percentile Queue Length [ft/ln]	262.84	465.03	459.35	63.98	857.48	846.99	257.00	376.51	368.99

Movement, Approach, & Intersection Results

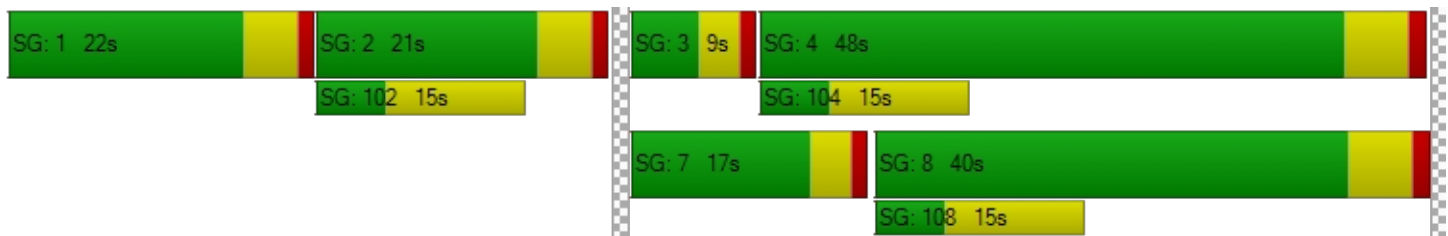
d_M, Delay for Movement [s/veh]	45.28	45.28	113.94	104.47	104.47	104.47	61.93	103.26	104.40	48.39	26.44	26.56
Movement LOS	D	D	F	F	F	F	E	F	F	D	C	C
d_A, Approach Delay [s/veh]	82.53			104.47			101.83			30.59		
Approach LOS	F			F			F			C		
d_I, Intersection Delay [s/veh]	72.49											
Intersection LOS	E											
Intersection V/C	0.971											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	41.41	41.41	41.41	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.428	2.137	3.085	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	342	322	686	846
d_b, Bicycle Delay [s]	34.36	35.20	21.58	16.65
I_b,int, Bicycle LOS Score for Intersection	2.490	2.088	2.654	2.639
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 16: SR-74 @ Briggs Rd

Control Type:	Signalized	Delay (sec / veh):	23.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.569

Intersection Setup

Name	Briggs Rd			Briggs Rd			SR-74			SR-74		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	200.00	100.00	100.00	150.00	100.00	100.00	130.00	100.00	1084.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Briggs Rd			Briggs Rd			SR-74			SR-74		
Base Volume Input [veh/h]	140	59	62	141	48	87	86	1225	183	46	944	70
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	146	61	64	147	50	90	89	1274	190	48	982	73
Peak Hour Factor	0.9680	0.9680	0.9680	0.9680	0.9680	0.9680	0.9680	0.9680	0.9680	0.9680	0.9680	0.9680
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	38	16	17	38	13	23	23	329	49	12	254	19
Total Analysis Volume [veh/h]	151	63	66	152	52	93	92	1316	196	50	1014	75
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	80
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	1	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	4.3	0.0	3.0	4.7	0.0	3.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	12	0	0	21	0	9	37	0	10	38	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	3.3	0.0	2.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	C
C, Cycle Length [s]	80	80	80	80	80	80	80	80	80	80
L, Total Lost Time per Cycle [s]	4.00	4.00	5.30	5.30	4.00	5.70	5.70	4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	3.30	3.30	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	8	8	9	9	5	41	41	3	39	39
g / C, Green / Cycle	0.10	0.10	0.11	0.11	0.07	0.51	0.51	0.04	0.48	0.48
(v / s)_i Volume / Saturation Flow Rate	0.08	0.08	0.09	0.09	0.05	0.37	0.12	0.03	0.29	0.29
s, saturation flow rate [veh/h]	1781	1715	1781	1680	1781	3560	1589	1781	1870	1825
c, Capacity [veh/h]	179	173	204	192	120	1796	802	78	898	876
d1, Uniform Delay [s]	35.44	35.07	34.39	34.43	36.77	15.63	11.24	37.76	15.36	15.37
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	10.07	6.27	5.34	5.88	9.57	2.69	0.73	8.64	3.12	3.21
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.84	0.75	0.75	0.75	0.76	0.73	0.24	0.64	0.61	0.61
d, Delay for Lane Group [s/veh]	45.51	41.35	39.73	40.31	46.34	18.32	11.97	46.40	18.49	18.57
Lane Group LOS	D	D	D	D	D	B	B	D	B	B
Critical Lane Group	Yes	No	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.22	2.60	2.99	2.88	1.97	8.20	1.77	1.09	6.84	6.70
50th-Percentile Queue Length [ft/ln]	80.42	64.91	74.65	71.93	49.15	204.95	44.34	27.17	170.93	167.47
95th-Percentile Queue Length [veh/ln]	5.79	4.67	5.37	5.18	3.54	12.89	3.19	1.96	11.13	10.94
95th-Percentile Queue Length [ft/ln]	144.75	116.84	134.37	129.47	88.47	322.34	79.82	48.91	278.14	273.58

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	45.51	41.35	41.35	39.73	40.31	40.31	46.34	18.32	11.97	46.40	18.53	18.57
Movement LOS	D	D	D	D	D	D	D	B	B	D	B	B
d_A, Approach Delay [s/veh]	43.59			40.01			19.15			19.75		
Approach LOS	D			D			B			B		
d_I, Intersection Delay [s/veh]	23.29											
Intersection LOS	C											
Intersection V/C	0.569											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	31.51	31.51	31.51	0.00
l_p,int, Pedestrian LOS Score for Intersection	2.218	2.193	3.224	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	200	393	783	808
d_b, Bicycle Delay [s]	32.40	25.84	14.82	14.22
l_b,int, Bicycle LOS Score for Intersection	2.022	2.050	2.883	2.499
Bicycle LOS	B	B	C	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 17: Matthews Rd @ Palomar Rd

Control Type:	Two-way stop	Delay (sec / veh):	17.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.121

Intersection Setup

Name	Palomar Rd		Matthews Rd		Matthews Rd	
Approach	Southbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	0	0
Entry Pocket Length [ft]	100.00	200.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Palomar Rd		Matthews Rd		Matthews Rd	
Base Volume Input [veh/h]	38	158	66	62	219	121
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	40	164	69	64	228	126
Peak Hour Factor	0.9810	0.9810	0.9810	0.9810	0.9810	0.9810
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	42	18	16	58	32
Total Analysis Volume [veh/h]	41	167	70	65	232	128
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.12	0.18	0.00	0.00	0.16	0.00
d_M, Delay for Movement [s/veh]	17.11	9.58	0.00	0.00	7.96	0.00
Movement LOS	C	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.41	0.63	0.00	0.00	0.57	0.57
95th-Percentile Queue Length [ft/ln]	10.24	15.84	0.00	0.00	14.24	14.24
d_A, Approach Delay [s/veh]	11.07		0.00		5.13	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	5.90					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 18: McLaughlin Rd @ Murrieta Rd

Control Type:	Two-way stop	Delay (sec / veh):	22.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.024

Intersection Setup

Name	Murrieta Rd			Murrieta Rd			McLaughlin Rd			McLaughlin Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	55.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Murrieta Rd			Murrieta Rd			McLaughlin Rd			McLaughlin Rd		
Base Volume Input [veh/h]	4	287	3	21	366	5	4	0	5	1	2	9
Base Volume Adjustment Factor	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	379	4	28	483	7	5	0	7	1	3	12
Peak Hour Factor	0.9270	0.9270	0.9270	0.9270	0.9270	0.9270	0.9270	0.9270	0.9270	0.9270	0.9270	0.9270
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	102	1	8	130	2	1	0	2	0	1	3
Total Analysis Volume [veh/h]	5	409	4	30	521	8	5	0	8	1	3	13
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.03	0.01	0.00	0.02	0.00	0.01	0.00	0.01	0.02
d_M, Delay for Movement [s/veh]	8.48	0.00	0.00	8.23	0.00	0.00	22.94	20.88	11.95	22.45	20.81	10.94
Movement LOS	A	A	A	A	A	A	C	C	B	C	C	B
95th-Percentile Queue Length [veh/ln]	0.01	0.00	0.00	0.08	0.00	0.00	0.12	0.12	0.12	0.12	0.12	0.12
95th-Percentile Queue Length [ft/ln]	0.36	0.00	0.00	2.02	0.00	0.00	3.02	3.02	3.02	2.95	2.95	2.95
d_A, Approach Delay [s/veh]	0.10			0.44			16.18			13.35		
Approach LOS	A			A			C			B		
d_I, Intersection Delay [s/veh]	0.72											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 19: McLaughlin Rd @ Encanto Dr

Control Type:	Two-way stop	Delay (sec / veh):	11.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.021

Intersection Setup

Name	Encanto Dr		Encanto Dr		McLaughlin Rd	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00		50.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Encanto Dr		Encanto Dr		McLaughlin Rd	
Base Volume Input [veh/h]	113	10	51	98	12	37
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	118	10	53	102	12	38
Peak Hour Factor	0.9590	0.9590	0.9590	0.9590	0.9590	0.9590
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	31	3	14	27	3	10
Total Analysis Volume [veh/h]	123	10	55	106	13	40
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.04	0.00	0.02	0.04
d_M, Delay for Movement [s/veh]	0.00	0.00	7.58	0.00	11.05	9.20
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.12	0.12	0.21	0.21
95th-Percentile Queue Length [ft/ln]	0.00	0.00	2.95	2.95	5.13	5.13
d_A, Approach Delay [s/veh]	0.00		2.59		9.66	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.68					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 20: McLaughlin Rd @ Trumble Rd

Control Type:	All-way stop	Delay (sec / veh):	7.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.045

Intersection Setup

Name	Trumble Rd			Trumble Rd			McLaughlin Rd			McLaughlin Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Trumble Rd			Trumble Rd			McLaughlin Rd			McLaughlin Rd		
Base Volume Input [veh/h]	32	4	0	0	0	7	8	0	25	0	0	0
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	33	4	0	0	0	7	8	0	26	0	0	0
Peak Hour Factor	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	1	0	0	0	2	2	0	7	0	0	0
Total Analysis Volume [veh/h]	35	4	0	0	0	7	9	0	28	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	859	1046	992	886
Degree of Utilization, x	0.05	0.01	0.04	0.00

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.14	0.02	0.12	0.00
95th-Percentile Queue Length [ft]	3.56	0.51	2.90	0.00
Approach Delay [s/veh]	7.39	6.47	6.77	0.00
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	7.04			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 21: McLaughlin Rd @ Sherman Rd

Control Type:	Two-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Sherman Rd			Sherman Rd			McLaughlin Rd			Dawson Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Sherman Rd			Sherman Rd			McLaughlin Rd			Dawson Rd		
Base Volume Input [veh/h]	0	5	0	0	2	0	0	1	0	0	0	0
Base Volume Adjustment Factor	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	7	0	0	3	0	0	1	0	0	0	0
Peak Hour Factor	0.4170	0.4170	0.4170	0.4170	0.4170	0.4170	0.4170	0.4170	0.4170	0.4170	0.4170	0.4170
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	4	0	0	2	0	0	1	0	0	0	0
Total Analysis Volume [veh/h]	0	17	0	0	7	0	0	2	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.23	0.00	0.00	7.25	0.00	0.00	8.66	9.15	8.36	8.66	9.14	8.39
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.17	0.17	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00			0.00			9.15			8.73		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	0.70											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 22: Rouse Rd @ Murrieta Rd

Control Type:	Two-way stop	Delay (sec / veh):	23.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.077

Intersection Setup

Name	Murrieta Rd			Murrieta Rd			Rouse Rd			Rouse Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	150.00	100.00	100.00	100.00	100.00	100.00	151.00	100.00	250.00	150.00	100.00	150.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Murrieta Rd			Murrieta Rd			Rouse Rd			Rouse Rd		
Base Volume Input [veh/h]	6	254	18	33	289	13	11	11	3	11	11	48
Base Volume Adjustment Factor	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	8	335	24	44	381	17	15	15	4	15	15	63
Peak Hour Factor	0.9420	0.9420	0.9420	0.9420	0.9420	0.9420	0.9420	0.9420	0.9420	0.9420	0.9420	0.9420
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	89	6	12	101	5	4	4	1	4	4	17
Total Analysis Volume [veh/h]	8	356	25	47	404	18	16	16	4	16	16	67
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.04	0.00	0.00	0.08	0.06	0.01	0.07	0.06	0.10
d_M, Delay for Movement [s/veh]	8.19	0.00	0.00	8.18	0.00	0.00	23.77	19.34	10.60	20.91	19.20	10.80
Movement LOS	A	A	A	A	A	A	C	C	B	C	C	B
95th-Percentile Queue Length [veh/ln]	0.02	0.00	0.00	0.12	0.00	0.00	0.25	0.19	0.02	0.21	0.19	0.32
95th-Percentile Queue Length [ft/ln]	0.53	0.00	0.00	3.12	0.00	0.00	6.19	4.75	0.47	5.27	4.70	8.06
d_A, Approach Delay [s/veh]	0.17			0.82			20.34			13.79		
Approach LOS	A			A			C			B		
d_I, Intersection Delay [s/veh]	2.57											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 23: Rouse Rd @ Encanto Dr

Control Type:	Two-way stop	Delay (sec / veh):	10.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.060

Intersection Setup

Name	Encanto Dr		Encanto Dr		Rouse Rd	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00		50.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Encanto Dr		Encanto Dr		Rouse Rd	
Base Volume Input [veh/h]	85	75	18	119	33	14
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	88	78	19	124	34	15
Peak Hour Factor	0.8780	0.8780	0.8780	0.8780	0.8780	0.8780
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	25	22	5	35	10	4
Total Analysis Volume [veh/h]	100	89	22	141	39	17
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.02	0.00	0.06	0.02
d_M, Delay for Movement [s/veh]	0.00	0.00	7.64	0.00	10.94	9.42
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.05	0.05	0.25	0.25
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.21	1.21	6.37	6.37
d_A, Approach Delay [s/veh]	0.00		1.03		10.48	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	1.85					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 24: McCall Blvd @ Bradley Rd

Control Type:	Signalized	Delay (sec / veh):	47.0
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.977

Intersection Setup

Name	Bradley Rd			Bradley Rd			McCall Blvd			McCall Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	90.00	100.00	100.00	365.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Bradley Rd			Bradley Rd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	68	56	524	92	48	10	19	524	67	463	619	111
Base Volume Adjustment Factor	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	90	74	692	121	63	13	25	692	88	611	817	147
Peak Hour Factor	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	19	182	32	17	3	7	182	23	161	215	39
Total Analysis Volume [veh/h]	95	78	729	128	66	14	26	729	93	644	861	155
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Version 2020 (SP 0-8)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Overlap	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	6	0	5	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	5	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	30	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.2	3.2	0.0	3.0	0.0	3.0	3.6	0.0	3.0	3.6	0.0
All red [s]	0.0	1.0	1.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	36	36	0	13	0	30	33	0	38	41	0
Vehicle Extension [s]	0.0	3.0	3.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	5	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	26	26	0	0	0	0	23	0	0	22	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	2.2	0.0	2.0	0.0	2.0	2.6	0.0	2.0	2.6	0.0
Minimum Recall		No	No		No		No	No		No	No	
Maximum Recall		No	No		No		No	No		No	No	
Pedestrian Recall		No	No		No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.20	4.20	4.00	4.00	4.00	4.00	4.60	4.60	4.00	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20	0.00	2.00	2.00	2.00	2.60	2.60	2.00	2.60	2.60
g_i, Effective Green Time [s]	22	22	70	9	9	3	29	29	43	69	69
g / C, Green / Cycle	0.19	0.19	0.58	0.08	0.08	0.02	0.24	0.24	0.36	0.57	0.57
(v / s)_i Volume / Saturation Flow Rate	0.05	0.04	0.46	0.07	0.04	0.01	0.22	0.22	0.36	0.28	0.28
s, saturation flow rate [veh/h]	1781	1870	1589	1781	1814	1781	1870	1797	1781	1870	1773
c, Capacity [veh/h]	333	349	925	134	136	43	445	428	641	1073	1018
d1, Uniform Delay [s]	41.91	41.40	19.38	55.31	53.71	57.98	44.88	44.89	38.40	15.02	15.18
k, delay calibration	0.11	0.11	0.50	0.11	0.11	0.11	0.50	0.50	0.47	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.47	0.32	6.77	27.27	3.99	12.88	30.15	31.05	35.42	1.54	1.70
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.29	0.22	0.79	0.96	0.59	0.60	0.94	0.94	1.00	0.48	0.49
d, Delay for Lane Group [s/veh]	42.38	41.72	26.15	82.58	57.70	70.86	75.03	75.94	73.82	16.56	16.88
Lane Group LOS	D	D	C	F	E	E	E	E	F	B	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.47	2.00	16.60	4.87	2.49	0.93	15.77	15.27	24.54	8.33	8.22
50th-Percentile Queue Length [ft/ln]	61.87	50.08	415.10	121.66	62.25	23.25	394.36	381.85	613.46	208.22	205.51
95th-Percentile Queue Length [veh/ln]	4.45	3.61	23.29	8.48	4.48	1.67	22.29	21.68	32.77	13.06	12.92
95th-Percentile Queue Length [ft/ln]	111.37	90.15	582.17	212.10	112.05	41.85	557.20	542.09	819.18	326.55	323.07

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	42.38	41.72	26.15	82.58	57.70	57.70	70.86	75.42	75.94	73.82	16.69	16.88
Movement LOS	D	D	C	F	E	E	E	E	E	F	B	B
d_A, Approach Delay [s/veh]	29.21			73.01			75.34			38.87		
Approach LOS	C			E			E			D		
d_I, Intersection Delay [s/veh]	46.97											
Intersection LOS	D											
Intersection V/C	0.977											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.562	2.107	2.729	0.000
Crosswalk LOS	B	B	B	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	530	150	473	607
d_b, Bicycle Delay [s]	32.41	51.34	34.96	29.12
I_b,int, Bicycle LOS Score for Intersection	3.048	1.903	2.259	2.929
Bicycle LOS	C	A	B	C

Sequence




Ring 1	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 25: McCall Blvd @ I-215 SB

Control Type:	Signalized	Delay (sec / veh):	30.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.863

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	455.00	100.00	100.00	400.00	235.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name				I-215 SB			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	0	0	0	324	1	490	0	895	293	289	858	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	337	1	510	0	931	305	301	892	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9590	0.9590	0.9590	1.0000	0.9590	0.9590	0.9590	0.9590	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	88	0	133	0	243	80	78	233	0
Total Analysis Volume [veh/h]	0	0	0	351	1	532	0	971	318	314	930	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing in		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Version 2020 (SP 0-8)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	5	0	0	5	0	5	5	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	3.2	0.0	0.0	3.6	0.0	3.0	3.6	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	39	0	0	41	0	40	81	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	24	0	0	21	0	0	15	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	2.2	0.0	0.0	2.6	0.0	2.0	2.6	0.0
Minimum Recall					No			No		No	No	
Maximum Recall					No			No		No	No	
Pedestrian Recall					No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		C	R	C	R	L	C
C, Cycle Length [s]		87	87	87	87	87	87
L, Total Lost Time per Cycle [s]		4.20	4.20	4.60	4.60	4.00	4.60
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		2.20	2.20	2.60	2.60	2.00	2.60
g_i, Effective Green Time [s]		30	30	27	27	18	49
g / C, Green / Cycle		0.34	0.34	0.31	0.31	0.20	0.56
(v / s)_i Volume / Saturation Flow Rate		0.20	0.33	0.27	0.20	0.18	0.26
s, saturation flow rate [veh/h]		1781	1589	3560	1589	1781	3560
c, Capacity [veh/h]		611	545	1098	490	360	1981
d1, Uniform Delay [s]		23.52	28.37	28.76	26.15	33.79	11.65
k, delay calibration		0.14	0.43	0.11	0.14	0.11	0.11
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		1.09	30.20	2.58	1.83	6.60	0.17
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.58	0.98	0.88	0.65	0.87	0.47
d, Delay for Lane Group [s/veh]		24.61	58.57	31.34	27.98	40.39	11.82
Lane Group LOS		C	E	C	C	D	B
Critical Lane Group		No	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		5.90	15.00	9.52	5.68	6.85	4.87
50th-Percentile Queue Length [ft/ln]		147.57	374.93	237.98	142.10	171.35	121.84
95th-Percentile Queue Length [veh/ln]		9.89	21.35	14.58	9.59	11.15	8.49
95th-Percentile Queue Length [ft/ln]		247.18	533.71	364.48	239.85	278.69	212.35

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	24.61	24.61	58.57	0.00	31.34	27.98	40.39	11.82	0.00
Movement LOS				C	C	E		C	C	D	B	
d_A, Approach Delay [s/veh]	0.00			45.05			30.51			19.03		
Approach LOS	A			D			C			B		
d_I, Intersection Delay [s/veh]	30.09											
Intersection LOS	C											
Intersection V/C	0.863											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.056	0.000	0.000	0.000
Crosswalk LOS	B	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	580	607	1273
d_b, Bicycle Delay [s]	60.00	30.25	29.12	7.92
I_b,int, Bicycle LOS Score for Intersection	4.132	3.018	2.623	2.586
Bicycle LOS	D	C	B	B

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 26: McCall Blvd @ I-215 NB

Control Type:	Signalized	Delay (sec / veh):	19.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.751

Intersection Setup

Name	I-215 NB						McCall Blvd			McCall Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	240.00	100.00	100.00	100.00	250.00	100.00	100.00	100.00	100.00	320.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name	I-215 NB						McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	397	5	378	0	0	0	301	927	0	0	725	173
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0000	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	413	5	393	0	0	0	313	964	0	0	754	180
Peak Hour Factor	0.9740	0.9740	0.9740	1.0000	1.0000	1.0000	0.9740	0.9740	1.0000	1.0000	0.9740	0.9740
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	106	1	101	0	0	0	80	247	0	0	194	46
Total Analysis Volume [veh/h]	424	5	403	0	0	0	321	990	0	0	774	185
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	0	0	5	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	0	0	0	5	5	0	0	5	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	3.2	0.0	0.0	0.0	0.0	3.0	3.6	0.0	0.0	3.6	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	22	0	0	0	0	28	38	0	0	10	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	3	0	0	0	0	0	17	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	0.0	0.0	2.0	2.6	0.0	0.0	2.6	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R		L	C	C	R
C, Cycle Length [s]	60	60		60	60	60	60
L, Total Lost Time per Cycle [s]	4.20	4.20		4.00	4.60	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20		2.00	2.60	2.60	2.60
g_i, Effective Green Time [s]	17	17		13	34	17	17
g / C, Green / Cycle	0.28	0.28		0.22	0.57	0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.24	0.25		0.18	0.28	0.22	0.12
s, saturation flow rate [veh/h]	1782	1589		1781	3560	3560	1589
c, Capacity [veh/h]	508	453		386	2025	1016	454
d1, Uniform Delay [s]	20.26	20.61		22.51	7.75	19.62	17.38
k, delay calibration	0.11	0.11		0.11	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.95	6.17		4.67	0.85	5.38	2.70
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.85	0.89		0.83	0.49	0.76	0.41
d, Delay for Lane Group [s/veh]	24.21	26.78		27.18	8.59	25.01	20.08
Lane Group LOS	C	C		C	A	C	C
Critical Lane Group	No	Yes		Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	5.68	5.67		4.41	3.03	5.11	2.18
50th-Percentile Queue Length [ft/ln]	141.95	141.73		110.17	75.83	127.69	54.54
95th-Percentile Queue Length [veh/ln]	9.59	9.57		7.85	5.46	8.81	3.93
95th-Percentile Queue Length [ft/ln]	239.65	239.35		196.24	136.50	220.35	98.17

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	24.21	24.21	26.78	0.00	0.00	0.00	27.18	8.59	0.00	0.00	25.01	20.08
Movement LOS	C	C	C				C	A			C	C
d_A, Approach Delay [s/veh]	25.46			0.00			13.14			24.06		
Approach LOS	C			A			B			C		
d_I, Intersection Delay [s/veh]	19.82											
Intersection LOS	B											
Intersection V/C	0.751											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.101	0.000	0.000	0.000
Crosswalk LOS	B	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	593	0	1113	180
d_b, Bicycle Delay [s]	14.84	30.00	5.90	24.84
I_b,int, Bicycle LOS Score for Intersection	2.932	4.132	2.641	2.351
Bicycle LOS	C	D	B	B

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 27: McCall Blvd @ Encanto Dr

Control Type:	Signalized	Delay (sec / veh):	16.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.673

Intersection Setup

Name	Encanto Dr			Encanto Dr			McCall Blvd			McCall Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	130.00	100.00	130.00	80.00	100.00	100.00	100.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Encanto Dr			Encanto Dr			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	173	25	3	33	25	115	164	903	238	36	610	35
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	180	26	3	34	26	120	171	939	248	37	634	36
Peak Hour Factor	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780	0.9780
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	46	7	1	9	7	31	44	240	63	9	162	9
Total Analysis Volume [veh/h]	184	27	3	35	27	123	175	960	254	38	648	37
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Version 2020 (SP 0-8)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.2	0.0	0.0	3.2	0.0	3.0	3.6	0.0	3.0	3.6	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	31	0	0	31	0	9	20	0	9	20	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	17	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	2.2	0.0	2.0	2.6	0.0	2.0	2.6	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	L	C	C	L	C	C
C, Cycle Length [s]	49	49	49	49	49	49	49	49	49	49	49
L, Total Lost Time per Cycle [s]	4.20	4.20	4.20	4.20	4.20	4.00	4.60	4.60	4.00	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20	2.20	2.20	2.20	2.00	2.60	2.60	2.00	2.60	2.60
g_i, Effective Green Time [s]	14	14	14	14	14	6	20	20	2	16	16
g / C, Green / Cycle	0.29	0.29	0.29	0.29	0.29	0.13	0.41	0.41	0.04	0.32	0.32
(v / s)_i Volume / Saturation Flow Rate	0.15	0.01	0.00	0.03	0.09	0.10	0.33	0.34	0.02	0.18	0.19
s, saturation flow rate [veh/h]	1237	1870	1589	1383	1634	1781	1870	1738	1781	1870	1835
c, Capacity [veh/h]	369	544	462	481	475	234	762	708	74	595	584
d1, Uniform Delay [s]	19.45	12.57	12.42	14.51	13.65	20.62	12.98	13.07	23.11	14.05	14.05
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.04	0.04	0.01	0.06	0.38	4.76	2.35	2.83	5.34	0.90	0.92
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.50	0.05	0.01	0.07	0.32	0.75	0.82	0.83	0.51	0.58	0.58
d, Delay for Lane Group [s/veh]	20.50	12.61	12.42	14.58	14.02	25.39	15.33	15.90	28.46	14.95	14.97
Lane Group LOS	C	B	B	B	B	C	B	B	C	B	B
Critical Lane Group	Yes	No	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.90	0.19	0.02	0.28	1.17	2.01	5.17	4.98	0.50	2.77	2.73
50th-Percentile Queue Length [ft/ln]	47.57	4.79	0.53	6.91	29.30	50.15	129.21	124.58	12.43	69.31	68.18
95th-Percentile Queue Length [veh/ln]	3.43	0.35	0.04	0.50	2.11	3.61	8.90	8.64	0.89	4.99	4.91
95th-Percentile Queue Length [ft/ln]	85.63	8.63	0.95	12.43	52.74	90.27	222.43	216.10	22.37	124.76	122.73

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	20.50	12.61	12.42	14.58	14.02	14.02	25.39	15.53	15.90	28.46	14.96	14.97
Movement LOS	C	B	B	B	B	B	C	B	B	C	B	B
d_A, Approach Delay [s/veh]	19.39			14.13			16.84			15.67		
Approach LOS	B			B			B			B		
d_I, Intersection Delay [s/veh]	16.52											
Intersection LOS	B											
Intersection V/C	0.673											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	21.68	0.00	21.68
I_p,int, Pedestrian LOS Score for Intersection	2.242	2.059	0.000	2.722
Crosswalk LOS	B	B	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	893	893	513	513
d_b, Bicycle Delay [s]	9.19	9.19	16.58	16.58
I_b,int, Bicycle LOS Score for Intersection	1.913	1.865	2.706	2.156
Bicycle LOS	A	A	B	B

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Appendix D-2

Opening Day Conditions (2024)

Menifee Commerce Center

Vistro File: H:\...\19-239 Menifee Commerce Center
100k.vistro

Scenario 3 Opening Day AM (2024)

Report File: H:\...\LOS - 2 Opening Day AM.pdf

2021-08-12

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Case Rd/Bonnie Dr @ I-215 SB	Signalized	HCM 6th Edition	SB Thru	1.041	77.0	E
2	SR-74 @ I-215 NB	Signalized	HCM 6th Edition	SEB Left	0.826	17.2	B
3	SR-74 @ Trumble Rd	Signalized	HCM 6th Edition	NWB Right	0.868	40.8	D
4	SR-74 @ Sherman Rd	Signalized	HCM 6th Edition	SEB Left	0.713	20.3	C
5	Ethanac Rd @ Murrieta Rd	Signalized	HCM 6th Edition	EB Left	0.716	27.9	C
6	Ethanac Rd @ Case Rd/Barnett Rd	Signalized	HCM 6th Edition	SB Left	0.714	38.2	D
7	Ethanac Rd @ I-215 SB	Signalized	HCM 6th Edition	EB Thru	0.874	37.6	D
8	Ethanac Rd @ I-215 NB	Signalized	HCM 6th Edition	NB Right	1.027	81.4	F
9	Ethanac Rd @ Encanto Dr	Two-way stop	HCM 6th Edition	NB Left	3.079	1,361.1	F
10	Ethanac Rd @ Trumble Rd	Signalized	HCM 6th Edition	EB Thru	1.032	59.6	E
11	Ethanac Rd @ Sherman Rd	Two-way stop	HCM 6th Edition	NB Thru	0.590	10,000.0	F
12	Ethanac Rd @ Dawson Rd	Two-way stop	HCM 6th Edition	NB Left	0.270	27.9	D
13	Ethanac Rd @ Antelope Rd	Two-way stop	HCM 6th Edition	SEB Left	0.085	23.7	C
14	SR-74 @ Palomar Rd	Signalized	HCM 6th Edition	EB Left	0.779	19.1	B
15	SR-74 @ Menifee Rd	Signalized	HCM 6th Edition	SB Thru	1.156	144.2	F
16	SR-74 @ Briggs Rd	Signalized	HCM 6th Edition	SB Thru	1.254	173.5	F
17	Matthews Rd @ Palomar Rd	Two-way stop	HCM 6th Edition	SB Left	0.399	45.2	E
	McLaughlin Rd @ Murrieta		HCM 6th				

18	McLaughlin Rd @ Murrieta Rd	Two-way stop	HCM 6th Edition	EB Left	0.043	15.7	C
19	McLaughlin Rd @ Encanto Dr	Two-way stop	HCM 6th Edition	WB Left	0.100	14.6	B
20	McLaughlin Rd @ Trumble Rd	All-way stop	HCM 6th Edition	EB Thru	0.175	7.8	A
21	McLaughlin Rd @ Sherman Rd	Two-way stop	HCM 6th Edition	EB Left	0.274	10.1	B
22	Rouse Rd @ Murrieta Rd	Two-way stop	HCM 6th Edition	EB Left	0.070	16.8	C
23	Rouse Rd @ Encanto Dr	Two-way stop	HCM 6th Edition	WB Left	0.280	17.5	C
24	McCall Blvd @ Bradley Rd	Signalized	HCM 6th Edition	EB Left	0.854	23.3	C
25	McCall Blvd @ I-215 SB	Signalized	HCM 6th Edition	WB Left	0.794	22.2	C
26	McCall Blvd @ I-215 NB	Signalized	HCM 6th Edition	NB Left	0.844	25.3	C
27	McCall Blvd @ Encanto Dr	Signalized	HCM 6th Edition	WB Right	0.836	48.3	D
28	Sherman Rd @ Project dwy 1	Two-way stop	HCM 6th Edition	WB Left	0.030	20.8	C
29	Sherman Rd @ Project dwy 2	Two-way stop	HCM 6th Edition	EB Left	0.031	12.1	B
30	Sherman Rd @ Project dwy 3	Two-way stop	HCM 6th Edition	EB Left	0.008	20.2	C
31	Trumble Rd @ Project dwy 4	Two-way stop	HCM 6th Edition	WB Left	0.002	8.6	A
32	Trumble Rd @ Project dwy 5	Two-way stop	HCM 6th Edition	WB Left	0.002	8.7	A
33	Dawson Rd @ Project dwy 6	Two-way stop	HCM 6th Edition	EB Left	0.043	9.9	A
34	Dawson Rd @ Project dwy 7	Two-way stop	HCM 6th Edition	EB Left	0.035	8.9	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Case Rd/Bonnie Dr @ I-215 SB

Control Type:	Signalized	Delay (sec / veh):	77.0
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.041

Intersection Setup

Name	Case Rd		I-215 SB		Bonnie Dr	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration	↵		↵		↵	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1
Entry Pocket Length [ft]	115.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Case Rd		I-215 SB		Bonnie Dr	
Base Volume Input [veh/h]	708	415	656	20	37	178
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	6	0	0	0	0	28
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	786	458	723	22	40	224
Peak Hour Factor	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	203	118	186	6	10	58
Total Analysis Volume [veh/h]	810	472	745	23	41	231
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing in	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Overlap	Split	Overlap
Signal Group	1	6	2	2	3	3
Auxiliary Signal Groups				1,2,3,6		1,2,3,6
Lead / Lag	Lag	-	-	-	Lead	-
Minimum Green [s]	5	5	5	5	5	5
Maximum Green [s]	30	30	30	30	30	30
Amber [s]	3.0	4.3	4.3	4.3	4.3	4.3
All red [s]	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	69	111	42	42	19	19
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	5	5	5	5	5
Pedestrian Clearance [s]	0	17	7	7	10	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	3.3	3.3	3.3	3.3	3.3
Minimum Recall	No	No	No	No	No	No
Maximum Recall	No	No	No	No	No	No
Pedestrian Recall	No	No	No	No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	R
C, Cycle Length [s]	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	4.00	5.30	5.30	5.30	5.30	5.30
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	3.30	3.30	0.00	3.30	0.00
g_i, Effective Green Time [s]	65	114	45	166	5	166
g / C, Green / Cycle	0.50	0.88	0.35	1.27	0.04	1.27
(v / s)_i Volume / Saturation Flow Rate	0.57	0.25	0.40	0.01	0.02	0.15
s, saturation flow rate [veh/h]	1417	1870	1870	1589	1781	1589
c, Capacity [veh/h]	737	1639	648	2027	75	2027
d1, Uniform Delay [s]	36.07	1.33	42.47	0.00	61.05	0.00
k, delay calibration	0.50	0.50	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	63.43	0.44	84.38	0.01	6.10	0.11
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	0.77	1.00	0.77
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.10	0.29	1.15	0.01	0.55	0.11
d, Delay for Lane Group [s/veh]	99.51	1.77	126.85	0.01	67.15	0.11
Lane Group LOS	F	A	F	A	E	A
Critical Lane Group	Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	36.28	0.77	35.07	0.01	1.43	0.06
50th-Percentile Queue Length [ft/ln]	906.96	19.19	876.68	0.14	35.73	1.61
95th-Percentile Queue Length [veh/ln]	49.65	1.38	49.10	0.01	2.57	0.12
95th-Percentile Queue Length [ft/ln]	1241.19	34.53	1227.43	0.26	64.31	2.89

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	99.51	1.77	126.85	0.01	67.15	0.11
Movement LOS	F	A	F	A	E	A
d_A, Approach Delay [s/veh]	63.52		123.05		10.22	
Approach LOS	E		F		B	
d_I, Intersection Delay [s/veh]	76.97					
Intersection LOS	E					
Intersection V/C	1.041					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	56.31	56.31	56.31
I_p,int, Pedestrian LOS Score for Intersection	2.976	2.584	3.650
Crosswalk LOS	C	B	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1626	565	211
d_b, Bicycle Delay [s]	2.27	33.48	52.02
I_b,int, Bicycle LOS Score for Intersection	3.675	2.827	1.560
Bicycle LOS	D	C	A

Sequence

Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-






Intersection Level Of Service Report

Intersection 2: SR-74 @ I-215 NB

Control Type:	Signalized	Delay (sec / veh):	17.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.826

Intersection Setup

Name	I-215 NB		SR-74		Case Rd	
Approach	Southbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	150.00	245.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	I-215 NB		SR-74		Case Rd	
Base Volume Input [veh/h]	238	321	804	491	21	812
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	6	0	0	28
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	263	354	892	542	23	923
Peak Hour Factor	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	67	90	228	138	6	235
Total Analysis Volume [veh/h]	268	361	910	553	23	942
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing in	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Permissive	Overlap	Protected	Permissive
Signal Group	7	0	6	6	5	2
Auxiliary Signal Groups				2,5,6,7		
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	5	5	5	5
Maximum Green [s]	30	0	30	30	30	30
Amber [s]	4.3	0.0	4.3	4.3	3.0	4.3
All red [s]	1.0	0.0	1.0	1.0	1.0	1.0
Split [s]	11	0	25	25	24	49
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	3.0
Walk [s]	0	0	5	5	0	5
Pedestrian Clearance [s]	0	0	10	10	0	14
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	3.3	0.0	3.3	3.3	2.0	3.3
Minimum Recall	No		No	No	No	No
Maximum Recall	No		No	No	No	No
Pedestrian Recall	No		No	No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C
C, Cycle Length [s]	64	64	64	64	64
L, Total Lost Time per Cycle [s]	5.30	5.30	4.87	4.00	5.30
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	3.30	3.30	0.00	2.00	3.30
g_i, Effective Green Time [s]	27	21	79	2	27
g / C, Green / Cycle	0.42	0.32	1.22	0.03	0.42
(v / s)_i Volume / Saturation Flow Rate	0.38	0.26	0.35	0.02	0.26
s, saturation flow rate [veh/h]	1666	3560	1589	1417	3560
c, Capacity [veh/h]	696	1157	1944	116	1489
d1, Uniform Delay [s]	17.58	19.74	0.00	32.24	14.85
k, delay calibration	0.29	0.11	0.24	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	11.24	1.22	0.18	0.83	0.45
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	0.76	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.90	0.79	0.28	0.20	0.63
d, Delay for Lane Group [s/veh]	28.82	20.96	0.18	33.08	15.30
Lane Group LOS	C	C	A	C	B
Critical Lane Group	Yes	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	9.09	5.39	0.10	0.36	4.47
50th-Percentile Queue Length [ft/ln]	227.17	134.74	2.43	9.01	111.80
95th-Percentile Queue Length [veh/ln]	14.03	9.20	0.17	0.65	7.94
95th-Percentile Queue Length [ft/ln]	350.76	229.93	4.37	16.21	198.51

Movement, Approach, & Intersection Results

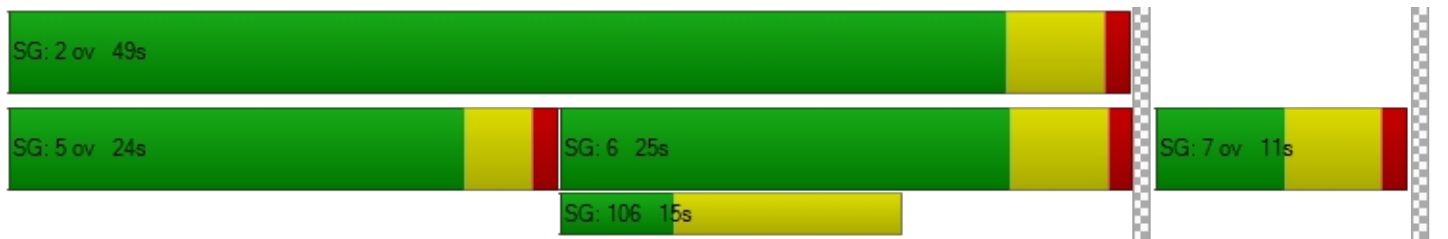
d_M, Delay for Movement [s/veh]	28.82	28.82	20.96	0.18	33.08	15.30
Movement LOS	C	C	C	A	C	B
d_A, Approach Delay [s/veh]	28.82		13.11		15.72	
Approach LOS	C		B		B	
d_I, Intersection Delay [s/veh]	17.17					
Intersection LOS	B					
Intersection V/C	0.826					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	5.7	5.7
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	24.57	24.57
I_p,int, Pedestrian LOS Score for Intersection	2.609	3.067	2.940
Crosswalk LOS	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	190	657	1457
d_b, Bicycle Delay [s]	24.57	13.53	2.21
I_b,int, Bicycle LOS Score for Intersection	2.597	2.767	2.356
Bicycle LOS	B	C	B

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 3: SR-74 @ Trumble Rd**

Control Type:	Signalized	Delay (sec / veh):	40.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.868

Intersection Setup

Name	Trumble		SR-74		SR-74	
Approach	Southwestbound		Northwestbound		Southeastbound	
Lane Configuration	⇐⇐		⇑⇑		⇐⇑⇑	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	255.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		Yes	

Volumes

Name	Trumble		SR-74		SR-74	
Base Volume Input [veh/h]	145	361	1040	90	228	754
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	28	0	6	6	0	28
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	188	398	1153	106	251	859
Peak Hour Factor	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	50	106	307	28	67	228
Total Analysis Volume [veh/h]	200	423	1227	113	267	914
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing in	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Protected	Permissive
Signal Group	7	0	6	0	5	2
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	5	0	5	5
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	4.3	0.0	4.3	0.0	3.0	4.3
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	21	0	21	0	18	39
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	10	0	10	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	3.3	0.0	3.3	0.0	2.0	3.3
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C	L	C
C, Cycle Length [s]	84	84	84	84	84	84
L, Total Lost Time per Cycle [s]	5.30	5.30	5.30	5.30	4.00	5.30
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.30	3.30	3.30	3.30	2.00	3.30
g_i, Effective Green Time [s]	25	25	30	30	15	49
g / C, Green / Cycle	0.29	0.29	0.36	0.36	0.18	0.58
(v / s)_i Volume / Saturation Flow Rate	0.11	0.27	0.36	0.37	0.15	0.26
s, saturation flow rate [veh/h]	1781	1589	1870	1816	1781	3560
c, Capacity [veh/h]	521	465	669	650	312	2068
d1, Uniform Delay [s]	23.60	28.55	26.89	26.89	33.52	9.90
k, delay calibration	0.11	0.24	0.42	0.44	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.46	13.91	32.27	41.45	6.73	0.15
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.38	0.91	1.00	1.03	0.86	0.44
d, Delay for Lane Group [s/veh]	24.06	42.45	59.16	68.34	40.25	10.05
Lane Group LOS	C	D	F	F	D	B
Critical Lane Group	No	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	2.97	9.23	17.86	19.00	5.49	3.85
50th-Percentile Queue Length [ft/ln]	74.32	230.77	446.51	475.03	137.34	96.29
95th-Percentile Queue Length [veh/ln]	5.35	14.21	24.81	26.70	9.34	6.93
95th-Percentile Queue Length [ft/ln]	133.77	355.34	620.30	667.49	233.44	173.31

Movement, Approach, & Intersection Results

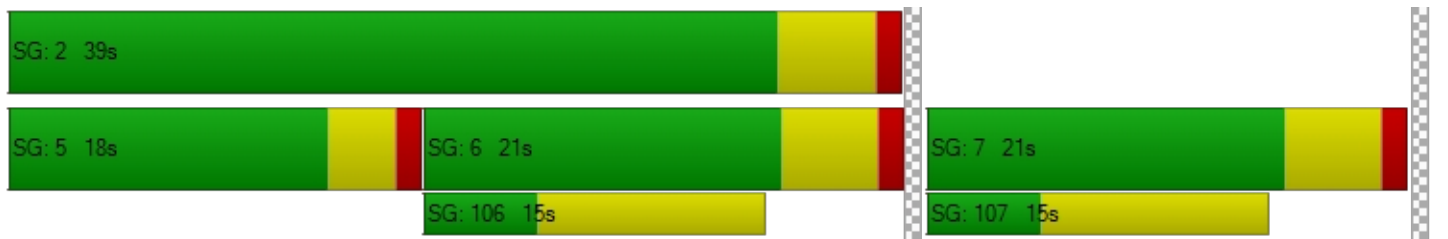
d_M, Delay for Movement [s/veh]	24.06	42.45	63.33	68.34	40.25	10.05
Movement LOS	C	D	E	E	D	B
d_A, Approach Delay [s/veh]	36.55		63.75		16.88	
Approach LOS	D		E		B	
d_I, Intersection Delay [s/veh]	40.76					
Intersection LOS	D					
Intersection V/C	0.868					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	21.68
I_p,int, Pedestrian LOS Score for Intersection	2.410	0.000	3.109
Crosswalk LOS	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	523	523	1123
d_b, Bicycle Delay [s]	16.35	16.35	5.76
I_b,int, Bicycle LOS Score for Intersection	1.560	2.665	2.534
Bicycle LOS	A	B	B

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 4: SR-74 @ Sherman Rd**

Control Type:	Signalized	Delay (sec / veh):	20.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.713

Intersection Setup

Name	Sherman Rd			Sherman Rd			SR-74			SR-74		
Approach	Southbound			Northeastbound			Northwestbound			Southeastbound		
Lane Configuration	Y			↶↷			↶↷			↶↷		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	120.00	185.00	100.00	100.00	270.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			40.00			30.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Sherman Rd			Sherman Rd			SR-74			SR-74		
Base Volume Input [veh/h]	0	2	92	63	16	146	118	1140	6	7	849	56
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	12	0	4	18	0	0	0	0	55
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	2	102	82	18	165	148	1257	6	7	936	116
Peak Hour Factor	0.9500	0.9400	0.9400	0.9400	0.9400	0.9500	0.9500	0.9500	0.9500	0.9400	0.9500	0.9400
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	27	22	5	43	39	331	2	2	246	31
Total Analysis Volume [veh/h]	0	2	109	87	19	174	156	1323	6	7	985	123
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	2	0	0	1	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.2	0.0	3.0	4.3	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	10	0	0	19	0	10	20	0	11	21	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.2	0.0	2.0	3.3	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	59	59	59	59	59	59	59	59	59
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.20	4.20	4.00	5.30	5.30
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.20	2.20	2.00	3.30	3.30
g_i, Effective Green Time [s]	5	9	9	7	28	28	1	21	21
g / C, Green / Cycle	0.09	0.15	0.15	0.12	0.48	0.48	0.01	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.07	0.06	0.11	0.09	0.36	0.36	0.00	0.30	0.30
s, saturation flow rate [veh/h]	1594	1796	1589	1781	1870	1867	1781	1870	1798
c, Capacity [veh/h]	143	267	236	205	897	896	16	664	639
d1, Uniform Delay [s]	26.48	22.90	24.20	25.50	12.48	12.48	29.30	17.70	17.71
k, delay calibration	0.11	0.11	0.11	0.11	0.23	0.23	0.11	0.14	0.14
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.67	0.96	4.43	5.69	2.59	2.60	16.34	4.01	4.20
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.78	0.40	0.74	0.76	0.74	0.74	0.42	0.85	0.85
d, Delay for Lane Group [s/veh]	35.14	23.85	28.63	31.19	15.07	15.09	45.64	21.72	21.90
Lane Group LOS	D	C	C	C	B	B	D	C	C
Critical Lane Group	Yes	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.82	1.28	2.38	2.32	6.52	6.52	0.16	6.45	6.24
50th-Percentile Queue Length [ft/ln]	45.44	31.89	59.51	58.12	162.98	162.89	4.11	161.35	156.12
95th-Percentile Queue Length [veh/ln]	3.27	2.30	4.29	4.18	10.71	10.70	0.30	10.62	10.34
95th-Percentile Queue Length [ft/ln]	81.78	57.40	107.13	104.61	267.67	267.55	7.41	265.51	258.57

Movement, Approach, & Intersection Results

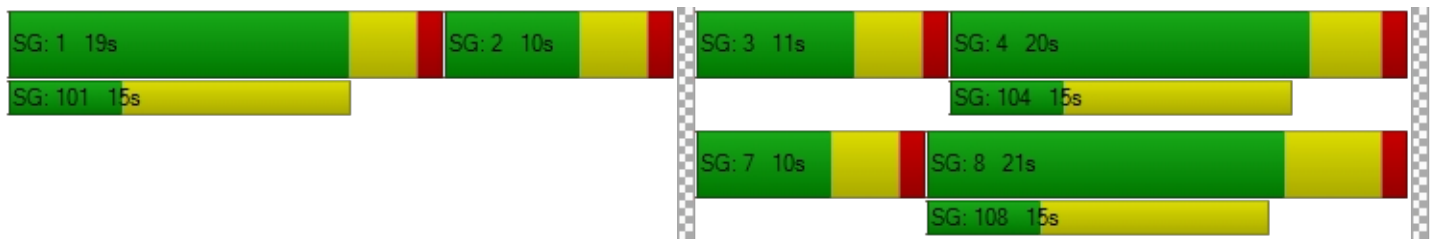
d_M, Delay for Movement [s/veh]	35.14	35.14	35.14	23.85	23.85	28.63	31.19	15.08	15.09	45.64	21.80	21.90
Movement LOS	D	D	D	C	C	C	C	B	B	D	C	C
d_A, Approach Delay [s/veh]	35.14			26.82			16.77			21.96		
Approach LOS	D			C			B			C		
d_I, Intersection Delay [s/veh]	20.33											
Intersection LOS	C											
Intersection V/C	0.713											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	21.68	21.68	0.00
I_p,int, Pedestrian LOS Score for Intersection	1.754	2.164	2.796	0.000
Crosswalk LOS	A	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	200	500	527	523
d_b, Bicycle Delay [s]	24.30	16.88	16.28	16.35
I_b,int, Bicycle LOS Score for Intersection	1.743	2.022	2.785	2.479
Bicycle LOS	A	B	C	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Ethanac Rd @ Murrieta Rd

Control Type:	Signalized	Delay (sec / veh):	27.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.716

Intersection Setup

Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	200.00	100.00	100.00	315.00	100.00	100.00	200.00	100.00	100.00	200.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			No		

Volumes

Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	184	188	145	19	43	13	10	574	78	102	495	330
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	56	9	0	0	0	28	0	12	6	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	202	208	216	30	48	15	11	661	86	124	552	366
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	55	57	59	8	13	4	3	180	23	34	150	99
Total Analysis Volume [veh/h]	220	226	235	33	52	16	12	718	93	135	600	398
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	1	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	4.3	0.0	3.0	4.7	0.0	3.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	21	0	0	24	0	21	23	0	22	24	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	3.3	0.0	2.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70	70
L, Total Lost Time per Cycle [s]	4.00	4.00	5.30	5.30	5.30	4.00	5.70	5.70	4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	3.30	3.30	3.30	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	21	21	4	4	4	1	18	18	7	24	24
g / C, Green / Cycle	0.31	0.31	0.06	0.06	0.06	0.01	0.26	0.26	0.10	0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.12	0.27	0.02	0.03	0.01	0.01	0.22	0.22	0.08	0.29	0.29
s, saturation flow rate [veh/h]	1781	1716	1781	1870	1589	1781	1870	1796	1781	1870	1625
c, Capacity [veh/h]	544	524	109	115	98	27	493	473	177	650	565
d1, Uniform Delay [s]	19.34	23.18	31.52	31.82	31.25	34.30	24.45	24.45	30.84	20.90	20.93
k, delay calibration	0.11	0.18	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.18	0.18
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.49	7.86	1.53	2.77	0.78	11.38	3.89	4.07	6.73	4.35	5.10
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.40	0.88	0.30	0.45	0.16	0.45	0.84	0.84	0.76	0.82	0.82
d, Delay for Lane Group [s/veh]	19.82	31.04	33.05	34.59	32.03	45.68	28.34	28.52	37.57	25.25	26.03
Lane Group LOS	B	C	C	C	C	D	C	C	D	C	C
Critical Lane Group	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.57	7.43	0.54	0.87	0.26	0.27	6.13	5.92	2.34	7.43	6.60
50th-Percentile Queue Length [ft/ln]	64.36	185.65	13.52	21.87	6.47	6.76	153.32	147.98	58.47	185.80	165.09
95th-Percentile Queue Length [veh/ln]	4.63	11.89	0.97	1.57	0.47	0.49	10.19	9.91	4.21	11.90	10.82
95th-Percentile Queue Length [ft/ln]	115.86	297.37	24.34	39.37	11.65	12.16	254.86	247.73	105.24	297.58	270.45

Movement, Approach, & Intersection Results

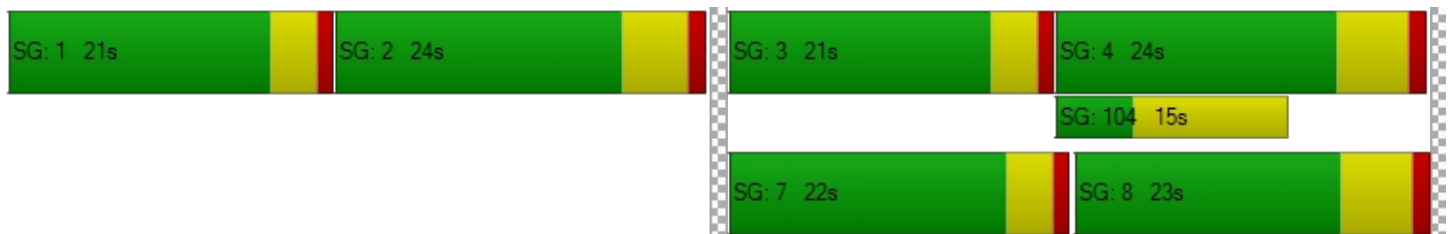
d_M, Delay for Movement [s/veh]	19.82	31.04	31.04	33.05	34.59	32.03	45.68	28.42	28.52	37.57	25.33	26.03
Movement LOS	B	C	C	C	C	C	D	C	C	D	C	C
d_A, Approach Delay [s/veh]	27.42			33.68			28.68			27.04		
Approach LOS	C			C			C			C		
d_I, Intersection Delay [s/veh]	27.87											
Intersection LOS	C											
Intersection V/C	0.716											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			9.0			0.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	0.00			36.45			0.00			0.00		
I_p,int, Pedestrian LOS Score for Intersection	0.000			2.402			0.000			0.000		
Crosswalk LOS	F			B			F			F		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	378			416			384			407		
d_b, Bicycle Delay [s]	29.61			28.24			29.36			28.56		
I_b,int, Bicycle LOS Score for Intersection	2.683			1.726			2.239			2.494		
Bicycle LOS	B			A			B			B		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Ethanac Rd @ Case Rd/Barnett Rd

Control Type:	Signalized	Delay (sec / veh):	38.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.714

Intersection Setup

Name	Barnett Rd			Case Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			T T T T			T T T			T T T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	230.00	100.00	120.00	150.00	100.00	100.00	110.00	100.00	270.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			40.00			30.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Barnett Rd			Case Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	21	3	80	310	0	118	109	728	26	60	870	352
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0000	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0000	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	92	0	0	21	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	23	3	88	341	0	130	120	894	29	66	980	388
Peak Hour Factor	0.9300	0.9300	0.9300	0.9300	1.0000	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	1	24	92	0	35	32	240	8	18	263	104
Total Analysis Volume [veh/h]	25	3	95	367	0	140	129	961	31	71	1054	417
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	65
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Permiss	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	7	0	0	0	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	5	0	5	0	0	0	5	0	5	5	0
Maximum Green [s]	0	30	0	30	0	0	0	30	0	5	30	0
Amber [s]	0.0	3.2	0.0	3.0	0.0	0.0	0.0	3.2	0.0	3.0	4.7	0.0
All red [s]	0.0	1.0	0.0	1.0	0.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	10	0	69	0	0	0	46	0	9	55	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	0.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	5	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	10	0	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No		No				No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	0.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	2.0	0.0	0.0	0.0	2.2	0.0	2.0	3.7	0.0
Minimum Recall		No		No				No		Yes	No	
Maximum Recall		No		No				No		No	No	
Pedestrian Recall		No		No				No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	R	L	C	R	L	C	R
C, Cycle Length [s]	31	31	31	31	31	31	31	31	31
L, Total Lost Time per Cycle [s]	4.20	0.00	0.00	4.20	4.20	4.20	4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	0.00	0.00	0.00	2.20	2.20	2.00	3.70	3.70
g_i, Effective Green Time [s]	4	0	0	12	12	12	2	17	17
g / C, Green / Cycle	0.12	0.00	0.00	0.40	0.40	0.40	0.07	0.55	0.55
(v / s)_i Volume / Saturation Flow Rate	0.11	0.98	0.05	0.14	0.27	0.02	0.05	0.30	0.26
s, saturation flow rate [veh/h]	1070	374	2813	892	3560	1589	1417	3560	1589
c, Capacity [veh/h]	273	234	0	341	1416	632	251	1972	881
d1, Uniform Delay [s]	13.57	15.36	0.00	11.98	7.64	5.69	13.88	4.34	4.14
k, delay calibration	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.16	274.55	0.00	0.69	0.58	0.03	0.61	0.23	0.40
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.45	1.57	10000.00	0.38	0.68	0.05	0.28	0.53	0.47
d, Delay for Lane Group [s/veh]	14.73	289.91	0.00	12.67	8.21	5.72	14.49	4.57	4.54
Lane Group LOS	B	F	F	B	A	A	B	A	A
Critical Lane Group	Yes	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.74	9.93	0.00	0.38	1.60	0.08	0.35	0.08	0.11
50th-Percentile Queue Length [ft/ln]	18.59	248.34	0.00	9.49	39.98	1.92	8.74	1.90	2.69
95th-Percentile Queue Length [veh/ln]	1.34	15.10	0.00	0.68	2.88	0.14	0.63	0.14	0.19
95th-Percentile Queue Length [ft/ln]	33.46	377.56	0.00	17.08	71.97	3.46	15.73	3.42	4.84

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	14.73	14.73	14.73	289.91	0.00	0.00	12.67	8.21	5.72	14.49	4.57	4.54
Movement LOS	B	B	B	F		A	B	A	A	B	A	A
d_A, Approach Delay [s/veh]	14.73			209.86			8.66			5.02		
Approach LOS	B			F			A			A		
d_I, Intersection Delay [s/veh]	38.16											
Intersection LOS	D											
Intersection V/C	0.714											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	24.12	24.12	24.12	0.00
I_p,int, Pedestrian LOS Score for Intersection	1.911	2.722	2.854	0.000
Crosswalk LOS	A	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	178	0	1286	1517
d_b, Bicycle Delay [s]	26.96	32.50	4.14	1.90
I_b,int, Bicycle LOS Score for Intersection	1.763	1.560	2.484	2.832
Bicycle LOS	A	A	B	C

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 7: Ethanac Rd @ I-215 SB**

Control Type:	Signalized	Delay (sec / veh):	37.6
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.874

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration				↑↑			↑↑			↑↑↑		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	240.00	100.00	100.00	100.00	275.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			45.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name				I-215 SB			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	0	0	0	103	1	200	0	589	402	112	619	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0600	1.0600	1.0600	1.0000	1.0600	1.0600	1.0600	1.0600	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0600	1.0600	1.0600	1.0000	1.0600	1.0600	1.0600	1.0600	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	352	0	0	0	92	0	69	21	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	468	1	225	0	753	452	195	716	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9600	0.9600	0.9600	1.0000	0.9600	0.9600	0.9600	0.9600	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	122	0	59	0	196	118	51	186	0
Total Analysis Volume [veh/h]	0	0	0	488	1	234	0	784	471	203	746	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	105
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	5	0	0	5	0	5	5	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	4.3	0.0	0.0	4.7	0.0	3.0	4.7	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	56	0	0	21	0	28	49	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	10	0	0	10	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	3.3	0.0	0.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall					No			No		No	No	
Maximum Recall					No			No		No	No	
Pedestrian Recall					No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		C	R	C	R	L	C
C, Cycle Length [s]		105	105	105	105	105	105
L, Total Lost Time per Cycle [s]		5.30	5.30	5.70	5.70	4.00	5.70
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		3.30	3.30	3.70	3.70	2.00	3.70
g_i, Effective Green Time [s]		32	32	44	44	14	62
g / C, Green / Cycle		0.30	0.30	0.42	0.42	0.13	0.59
(v / s)_i Volume / Saturation Flow Rate		0.27	0.15	0.42	0.30	0.11	0.21
s, saturation flow rate [veh/h]		1781	1589	1870	1589	1781	3560
c, Capacity [veh/h]		536	478	788	670	240	2116
d1, Uniform Delay [s]		35.36	30.08	30.24	24.96	44.38	10.93
k, delay calibration		0.13	0.11	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		7.83	0.78	30.75	6.08	8.04	0.46
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.91	0.49	0.99	0.70	0.85	0.35
d, Delay for Lane Group [s/veh]		43.19	30.86	60.99	31.04	52.42	11.40
Lane Group LOS		D	C	E	C	D	B
Critical Lane Group		Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		12.51	4.72	24.38	9.88	5.45	3.93
50th-Percentile Queue Length [ft/ln]		312.65	117.98	609.59	247.07	136.26	98.27
95th-Percentile Queue Length [veh/ln]		18.31	8.28	32.48	15.04	9.28	7.08
95th-Percentile Queue Length [ft/ln]		457.64	207.04	812.05	375.96	231.98	176.88

Movement, Approach, & Intersection Results

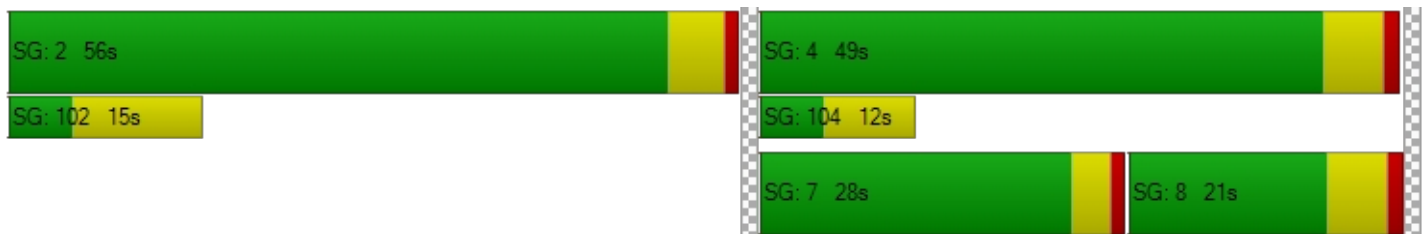
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	43.19	43.19	30.86	0.00	60.99	31.04	52.42	11.40	0.00
Movement LOS				D	D	C		E	C	D	B	
d_A, Approach Delay [s/veh]	0.00			39.20			49.75			20.17		
Approach LOS	A			D			D			C		
d_I, Intersection Delay [s/veh]	37.55											
Intersection LOS	D											
Intersection V/C	0.874											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	43.89	0.00	43.89
I_p,int, Pedestrian LOS Score for Intersection	0.000	2.253	0.000	3.042
Crosswalk LOS	F	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	966	291	825
d_b, Bicycle Delay [s]	52.50	14.04	38.31	18.13
I_b,int, Bicycle LOS Score for Intersection	4.132	2.753	3.630	2.343
Bicycle LOS	D	C	D	B

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 8: Ethanac Rd @ I-215 NB**

Control Type:	Signalized	Delay (sec / veh):	81.4
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.027

Intersection Setup

Name	I-215 NB						Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	265.00	100.00	100.00	100.00	245.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name	I-215 NB						Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	288	3	109	0	0	0	204	487	0	0	456	152
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0000	1.0000	1.0000	1.0600	1.0600	1.0000	1.0000	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0000	1.0000	1.0000	1.0600	1.0600	1.0000	1.0000	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	250	0	0	0	0	445	0	0	90	99
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	323	3	373	0	0	0	229	992	0	0	602	270
Peak Hour Factor	0.9400	0.9400	0.9400	1.0000	1.0000	1.0000	0.9400	0.9400	1.0000	1.0000	0.9400	0.9400
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	86	1	99	0	0	0	61	264	0	0	160	72
Total Analysis Volume [veh/h]	344	3	397	0	0	0	244	1055	0	0	640	287
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	70
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	0	0	0	5	5	0	0	5	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	3.2	0.0	0.0	0.0	0.0	3.0	4.7	0.0	0.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	16	0	0	0	0	15	54	0	0	39	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	7	0	0	0	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	0.0	0.0	2.0	3.7	0.0	0.0	3.7	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R		L	C	C
C, Cycle Length [s]	70	70		70	70	70
L, Total Lost Time per Cycle [s]	4.20	4.20		4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20		2.00	3.70	3.70
g_i, Effective Green Time [s]	12	12		12	48	33
g / C, Green / Cycle	0.17	0.17		0.17	0.69	0.47
(v / s)_i Volume / Saturation Flow Rate	0.19	0.25		0.14	0.56	0.52
s, saturation flow rate [veh/h]	1782	1589		1781	1870	1773
c, Capacity [veh/h]	302	269		298	1289	825
d1, Uniform Delay [s]	29.13	29.13		28.16	7.75	18.76
k, delay calibration	0.11	0.14		0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	76.51	219.77		5.49	5.86	71.39
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.15	1.48		0.82	0.82	1.12
d, Delay for Lane Group [s/veh]	105.64	248.90		33.65	13.61	90.15
Lane Group LOS	F	F		C	B	F
Critical Lane Group	No	Yes		Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	11.23	20.73		3.97	7.53	26.53
50th-Percentile Queue Length [ft/ln]	280.85	518.23		99.17	188.34	663.23
95th-Percentile Queue Length [veh/ln]	17.83	32.98		7.14	12.03	38.04
95th-Percentile Queue Length [ft/ln]	445.71	824.39		178.51	300.87	951.05

Movement, Approach, & Intersection Results

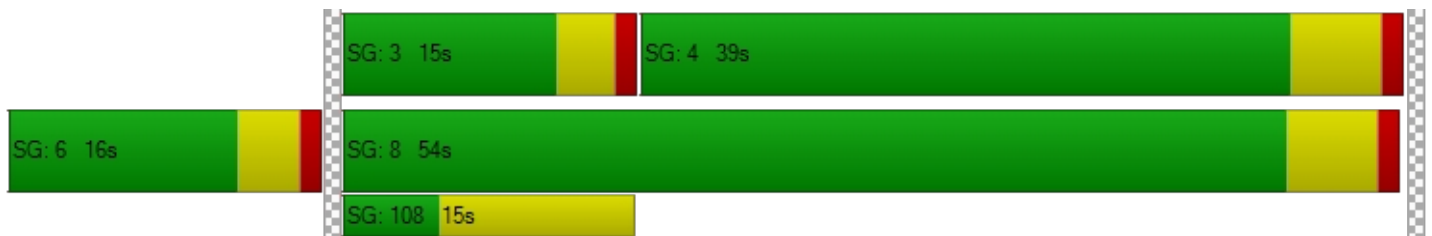
d_M, Delay for Movement [s/veh]	105.64	105.64	248.90	0.00	0.00	0.00	33.65	13.61	0.00	0.00	90.15	90.15
Movement LOS	F	F	F				C	B			F	F
d_A, Approach Delay [s/veh]	182.08			0.00			17.38			90.15		
Approach LOS	F			A			B			F		
d_I, Intersection Delay [s/veh]	81.35											
Intersection LOS	F											
Intersection V/C	1.027											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	26.58	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.066	0.000	0.000	0.000
Crosswalk LOS	B	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	337	0	1380	951
d_b, Bicycle Delay [s]	24.19	35.00	3.36	9.62
I_b,int, Bicycle LOS Score for Intersection	2.787	4.132	3.703	3.089
Bicycle LOS	C	D	D	C

Sequence

Ring 1	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 9: Ethanac Rd @ Encanto Dr

Control Type:	Two-way stop	Delay (sec / veh):	1,361.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	3.079

Intersection Setup

Name	Encanto Dr		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Encanto Dr		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	92	75	485	115	41	519
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	695	0	0	188
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	104	85	1240	129	46	771
Peak Hour Factor	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	28	23	333	35	12	207
Total Analysis Volume [veh/h]	112	91	1333	139	49	829
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	1	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	3.08	0.53	0.01	0.00	0.11	0.01
d_M, Delay for Movement [s/veh]	1361.11	1283.15	0.00	0.00	13.80	0.00
Movement LOS	F	F	A	A	B	A
95th-Percentile Queue Length [veh/ln]	21.83	21.83	0.00	0.00	0.36	0.00
95th-Percentile Queue Length [ft/ln]	545.81	545.81	0.00	0.00	8.92	0.00
d_A, Approach Delay [s/veh]	1326.16		0.00		0.77	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	105.71					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 10: Ethanac Rd @ Trumble Rd

Control Type:	Signalized	Delay (sec / veh):	59.6
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.032

Intersection Setup

Name	Trumble Rd			Trumble Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↑			↵↑			↵↑↵			↵↑		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	85.00	100.00	100.00	100.00	100.00	100.00	155.00	100.00	100.00	110.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Trumble Rd			Trumble Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	4	1	6	17	1	138	109	432	2	7	437	14
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	695	0	0	188	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	1	6	19	1	155	123	1180	2	7	679	16
Peak Hour Factor	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	2	5	0	44	35	331	1	2	191	4
Total Analysis Volume [veh/h]	4	1	7	21	1	174	138	1326	2	8	763	18
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	80
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	0	5	5	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.2	0.0	3.0	3.2	0.0	3.0	4.7	0.0	3.0	4.7	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	18	20	0	10	11	0	21	42	0	9	30	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	5	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	10	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.2	0.0	2.0	2.2	0.0	2.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C
C, Cycle Length [s]	80	80	80	80	80	80	80	80	80
L, Total Lost Time per Cycle [s]	4.00	4.20	4.00	4.20	4.00	5.70	5.70	4.00	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.20	2.00	2.20	2.00	3.70	3.70	2.00	3.70
g_i, Effective Green Time [s]	0	9	2	11	8	50	50	1	43
g / C, Green / Cycle	0.01	0.12	0.02	0.13	0.10	0.63	0.63	0.01	0.54
(v / s)_i Volume / Saturation Flow Rate	0.00	0.00	0.01	0.11	0.08	0.71	0.00	0.00	0.42
s, saturation flow rate [veh/h]	1781	1620	1781	1591	1781	1870	1589	1781	1862
c, Capacity [veh/h]	12	188	44	213	179	1167	992	21	997
d1, Uniform Delay [s]	39.66	31.50	38.59	33.79	35.19	15.07	5.67	39.36	14.90
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	14.87	0.09	7.59	7.59	6.91	72.06	0.00	11.40	6.13
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.33	0.04	0.47	0.82	0.77	1.14	0.00	0.39	0.78
d, Delay for Lane Group [s/veh]	54.53	31.59	46.18	41.39	42.11	87.14	5.67	50.76	21.03
Lane Group LOS	D	C	D	D	D	F	A	D	C
Critical Lane Group	Yes	No	No	Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.13	0.14	0.49	3.67	2.77	37.45	0.01	0.21	10.45
50th-Percentile Queue Length [ft/ln]	3.19	3.50	12.35	91.85	69.32	936.29	0.25	5.30	261.29
95th-Percentile Queue Length [veh/ln]	0.23	0.25	0.89	6.61	4.99	52.65	0.02	0.38	15.75
95th-Percentile Queue Length [ft/ln]	5.73	6.29	22.23	165.33	124.78	1316.14	0.45	9.53	393.84

Movement, Approach, & Intersection Results

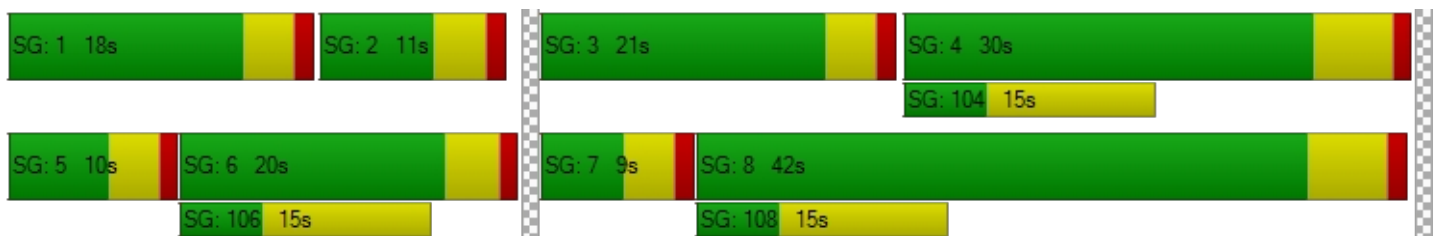
d_M, Delay for Movement [s/veh]	54.53	31.59	31.59	46.18	41.39	41.39	42.11	87.14	5.67	50.76	21.03	21.03
Movement LOS	D	C	C	D	D	D	D	F	A	D	C	C
d_A, Approach Delay [s/veh]	39.24			41.90			82.79			21.33		
Approach LOS	D			D			F			C		
d_I, Intersection Delay [s/veh]	59.63											
Intersection LOS	E											
Intersection V/C	1.032											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	31.51	31.51	0.00	31.51
I_p,int, Pedestrian LOS Score for Intersection	1.943	2.051	0.000	3.097
Crosswalk LOS	A	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	395	170	908	608
d_b, Bicycle Delay [s]	25.76	33.49	11.94	19.39
I_b,int, Bicycle LOS Score for Intersection	1.579	1.883	3.979	2.861
Bicycle LOS	A	A	D	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 11: Ethanac Rd @ Sherman Rd

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.590

Intersection Setup

Name	Sherman Rd			Sherman Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Sherman Rd			Sherman Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	6	3	2	4	3	102	97	340	13	8	354	3
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	138	12	18	20	54	0	0	191	504	80	50	5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	144	15	20	24	57	114	109	573	519	88	448	8
Peak Hour Factor	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	40	4	6	7	16	32	31	161	146	25	126	2
Total Analysis Volume [veh/h]	162	17	22	27	64	128	122	644	583	99	503	9
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.59	0.07	1.84	3.36	0.23	0.12	0.01	0.01	0.17	0.01	0.00
d_M, Delay for Movement [s/veh]	10000.0	10000.0	10000.0	2345.18	2289.61	2106.79	8.86	0.00	0.00	12.67	0.00	0.00
Movement LOS	F	F	F	F	F	F	A	A	A	B	A	A
95th-Percentile Queue Length [veh/ln]	27.83	27.83	27.83	25.54	25.54	25.54	0.39	0.39	0.39	0.63	0.63	0.63
95th-Percentile Queue Length [ft/ln]	695.83	695.83	695.83	638.61	638.61	638.61	9.79	9.79	9.79	15.66	15.66	15.66
d_A, Approach Delay [s/veh]	10000.00			2189.60			0.80			2.05		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	1047.00											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 12: Ethanac Rd @ Dawson Rd

Control Type:	Two-way stop	Delay (sec / veh):	27.9
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.270

Intersection Setup

Name	Dawson Rd		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Dawson Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	2	377	1	3	332
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	55	7	18	211	31	80
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	55	9	442	212	34	453
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	2	116	56	9	119
Total Analysis Volume [veh/h]	58	9	465	223	36	477
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.27	0.02	0.00	0.00	0.04	0.00
d_M, Delay for Movement [s/veh]	27.92	18.10	0.00	0.00	9.14	0.00
Movement LOS	D	C	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.15	1.15	0.00	0.00	0.12	0.12
95th-Percentile Queue Length [ft/ln]	28.73	28.73	0.00	0.00	3.10	3.10
d_A, Approach Delay [s/veh]	26.60		0.00		0.64	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	1.67					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 13: Ethanac Rd @ Antelope Rd

Control Type:	Two-way stop	Delay (sec / veh):	23.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.085

Intersection Setup

Name	Antelope Rd			Ethanac Rd			Matthews Rd			Antelope Rd		
Approach	Northbound			Eastbound			Westbound			Southeastbound		
Lane Configuration	←			→			↑			↘		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	250.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			50.00			50.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Antelope Rd			Ethanac Rd			Matthews Rd			Antelope Rd		
Base Volume Input [veh/h]	9	0	2	1	399	8	2	348	26	15	1	0
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0000	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	25	0	0	111	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	0	2	1	465	8	2	495	29	17	1	0
Peak Hour Factor	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	0	1	0	121	2	1	129	8	4	0	0
Total Analysis Volume [veh/h]	10	0	2	1	484	8	2	516	30	18	1	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Free	Free	Stop
Flared Lane	No			No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No			No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.09	0.00	0.00
d_M, Delay for Movement [s/veh]	22.69	21.41	11.98	8.52	0.00	0.00	8.37	0.00	0.00	23.66	22.12	13.22
Movement LOS	C	C	B	A	A	A	A	A	A	C	C	B
95th-Percentile Queue Length [veh/ln]	0.16	0.16	0.16	0.00	0.00	0.00	0.01	0.01	0.01	0.29	0.29	0.29
95th-Percentile Queue Length [ft/ln]	3.95	3.95	3.95	0.07	0.07	0.00	0.14	0.14	0.14	7.27	7.27	7.27
d_A, Approach Delay [s/veh]	20.90			0.02			0.03			23.58		
Approach LOS	C			A			A			C		
d_I, Intersection Delay [s/veh]	0.68											
Intersection LOS	C											

**Intersection Level Of Service Report
Intersection 14: SR-74 @ Palomar Rd**

Control Type:	Signalized	Delay (sec / veh):	19.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.779

Intersection Setup

Name	Palomar Rd			Palomar Rd			SR-74			SR-74		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	200.00	100.00	200.00	190.00	100.00	100.00	240.00	100.00	100.00	230.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Palomar Rd			Palomar Rd			SR-74			SR-74		
Base Volume Input [veh/h]	108	53	231	64	73	34	20	911	42	148	1025	29
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	17	0	9	0	0	0	0	74	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	119	60	271	71	90	37	22	1004	47	237	1130	32
Peak Hour Factor	0.9500	0.9400	0.9400	0.9400	0.9400	0.9500	0.9500	0.9500	0.9500	0.9400	0.9500	0.9400
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	31	16	72	19	24	10	6	264	12	63	297	9
Total Analysis Volume [veh/h]	125	64	288	76	96	39	23	1057	49	252	1189	34
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	4.3	0.0	0.0	4.3	0.0	3.0	4.3	0.0	3.0	4.3	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	30	0	0	30	0	30	30	0	30	30	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.3	0.0	0.0	3.3	0.0	2.0	3.3	0.0	2.0	3.3	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	59	59	59	59	59	59	59	59	59	59	59	59
L, Total Lost Time per Cycle [s]	5.30	5.30	5.30	5.30	5.30	5.30	4.00	5.30	5.30	4.00	5.30	5.30
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.30	3.30	3.30	3.30	3.30	3.30	2.00	3.30	3.30	2.00	3.30	3.30
g_i, Effective Green Time [s]	13	13	13	13	13	13	2	21	21	10	30	30
g / C, Green / Cycle	0.23	0.23	0.23	0.23	0.23	0.23	0.03	0.35	0.35	0.18	0.50	0.50
(v / s)_i Volume / Saturation Flow Rate	0.10	0.03	0.18	0.06	0.04	0.04	0.01	0.30	0.30	0.14	0.33	0.33
s, saturation flow rate [veh/h]	1254	1870	1589	1338	1870	1694	1781	1870	1841	1781	1870	1852
c, Capacity [veh/h]	324	423	359	343	423	383	48	657	647	315	937	928
d1, Uniform Delay [s]	23.15	18.41	21.72	21.89	18.46	18.50	28.48	17.79	17.79	23.44	10.99	11.01
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.13	0.13	0.11	0.17	0.18
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.75	0.16	4.18	0.32	0.18	0.21	7.35	3.83	3.91	4.73	1.26	1.29
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.39	0.15	0.80	0.22	0.16	0.17	0.48	0.85	0.85	0.80	0.65	0.66
d, Delay for Lane Group [s/veh]	23.90	18.58	25.89	22.21	18.64	18.72	35.83	21.62	21.70	28.17	12.25	12.30
Lane Group LOS	C	B	C	C	B	B	D	C	C	C	B	B
Critical Lane Group	No	No	Yes	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.49	0.63	3.64	0.85	0.68	0.65	0.39	6.34	6.26	3.34	4.57	4.55
50th-Percentile Queue Length [ft/ln]	37.19	15.68	91.07	21.23	16.91	16.35	9.69	158.57	156.51	83.60	114.34	113.83
95th-Percentile Queue Length [veh/ln]	2.68	1.13	6.56	1.53	1.22	1.18	0.70	10.47	10.36	6.02	8.08	8.05
95th-Percentile Queue Length [ft/ln]	66.94	28.22	163.93	38.22	30.44	29.44	17.44	261.83	259.10	150.49	202.02	201.31

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	23.90	18.58	25.89	22.21	18.66	18.72	35.83	21.66	21.70	28.17	12.28	12.30
Movement LOS	C	B	C	C	B	B	D	C	C	C	B	B
d_A, Approach Delay [s/veh]	24.39			19.95			21.95			14.99		
Approach LOS	C			B			C			B		
d_I, Intersection Delay [s/veh]	19.06											
Intersection LOS	B											
Intersection V/C	0.779											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.557	2.254	3.205	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	549	549	549	549
d_b, Bicycle Delay [s]	23.69	23.69	23.69	23.69
I_b,int, Bicycle LOS Score for Intersection	2.347	1.734	2.491	2.776
Bicycle LOS	B	A	B	C

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 15: SR-74 @ Menifee Rd**

Control Type:	Signalized	Delay (sec / veh):	144.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.156

Intersection Setup

Name	Menifee Rd			Menifee Rd			SR-74			SR-74		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	350.00	100.00	100.00	350.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Menifee Rd			Menifee Rd			SR-74			SR-74		
Base Volume Input [veh/h]	123	212	359	114	210	25	98	897	189	251	1050	142
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	18	4	12	0	0	55	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	136	233	395	126	231	46	112	1001	209	277	1213	157
Peak Hour Factor	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	36	62	105	34	61	12	30	266	56	74	323	42
Total Analysis Volume [veh/h]	145	248	420	134	246	49	119	1065	222	295	1290	167
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	105
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	1	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.9	0.0	0.0	3.9	0.0	3.0	4.7	0.0	3.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	25	0	0	23	0	10	40	0	17	47	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.9	0.0	0.0	2.9	0.0	2.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	105	105	105	105	105	105	105	105	105
L, Total Lost Time per Cycle [s]	4.90	4.90	4.90	4.00	5.70	5.70	4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.90	2.90	2.90	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	20	20	18	6	28	28	20	41	41
g / C, Green / Cycle	0.19	0.19	0.17	0.06	0.26	0.26	0.19	0.39	0.39
(v / s)_i Volume / Saturation Flow Rate	0.21	0.26	0.24	0.07	0.35	0.36	0.17	0.39	0.40
s, saturation flow rate [veh/h]	1836	1589	1805	1781	1870	1760	1781	1870	1797
c, Capacity [veh/h]	352	304	310	106	494	465	333	733	704
d1, Uniform Delay [s]	42.46	42.46	43.51	49.39	38.64	38.64	41.59	31.94	31.94
k, delay calibration	0.25	0.38	0.31	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	71.27	185.96	185.58	78.09	163.65	171.09	7.82	33.65	41.11
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.12	1.38	1.39	1.12	1.33	1.35	0.89	1.00	1.03
d, Delay for Lane Group [s/veh]	113.73	228.43	229.09	127.47	202.29	209.73	49.41	65.59	73.05
Lane Group LOS	F	F	F	F	F	F	D	F	F
Critical Lane Group	No	Yes	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	15.76	23.34	23.74	4.97	34.34	33.28	7.77	23.63	24.17
50th-Percentile Queue Length [ft/ln]	394.09	583.54	593.59	124.36	858.45	832.06	194.21	590.84	604.15
95th-Percentile Queue Length [veh/ln]	23.57	36.13	36.56	8.92	51.23	50.03	12.34	31.64	32.87
95th-Percentile Queue Length [ft/ln]	589.29	903.28	913.91	222.88	1280.79	1250.83	308.48	791.12	821.70

Movement, Approach, & Intersection Results

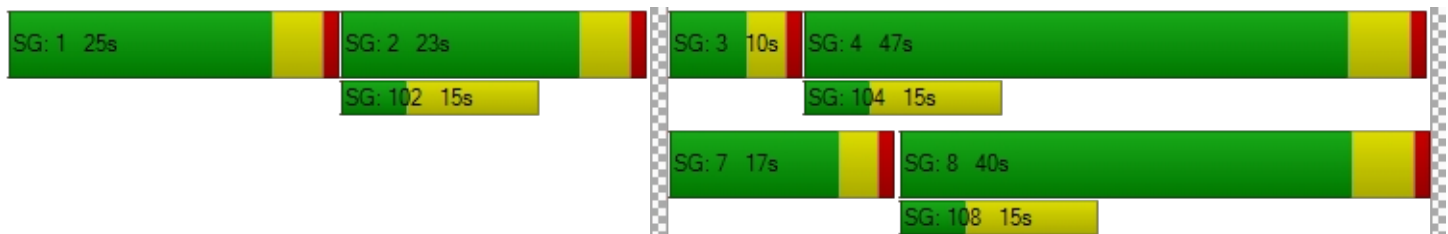
d_M, Delay for Movement [s/veh]	113.73	113.73	228.43	229.09	229.09	229.09	127.47	205.12	209.73	49.41	68.81	73.05
Movement LOS	F	F	F	F	F	F	F	F	F	D	E	E
d_A, Approach Delay [s/veh]	172.98			229.09			199.28			65.95		
Approach LOS	F			F			F			E		
d_I, Intersection Delay [s/veh]	144.24											
Intersection LOS	F											
Intersection V/C	1.156											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	43.89	43.89	43.89	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.632	2.350	3.248	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	383	345	653	787
d_b, Bicycle Delay [s]	34.32	35.96	23.80	19.32
I_b,int, Bicycle LOS Score for Intersection	2.901	2.267	2.720	3.005
Bicycle LOS	C	B	B	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 16: SR-74 @ Briggs Rd**

Control Type:	Signalized	Delay (sec / veh):	173.5
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.254

Intersection Setup

Name	Briggs Rd			Briggs Rd			SR-74			SR-74		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇐⇑⇓⇑⇐			⇐⇑⇓⇑⇐			⇑⇓⇑⇓⇑⇓⇑			⇐⇑⇓⇑⇐		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	200.00	100.00	100.00	150.00	100.00	100.00	130.00	100.00	1084.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Briggs Rd			Briggs Rd			SR-74			SR-74		
Base Volume Input [veh/h]	474	218	132	222	200	103	106	595	605	235	894	162
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	18	0	0	0	0	9	2	6	4	0	28	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	541	241	145	245	220	122	119	662	671	259	1014	178
Peak Hour Factor	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	159	71	43	72	65	36	35	195	197	76	298	52
Total Analysis Volume [veh/h]	636	284	171	288	259	144	140	779	789	305	1193	209
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	1	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	4.3	0.0	3.0	4.7	0.0	3.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	30	0	0	22	0	13	52	0	16	55	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	3.3	0.0	2.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	5.30	5.30	4.00	5.70	5.70	4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	3.30	3.30	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	26	26	17	17	9	36	36	23	49	49
g / C, Green / Cycle	0.22	0.22	0.14	0.14	0.08	0.30	0.30	0.19	0.41	0.41
(v / s)_i Volume / Saturation Flow Rate	0.36	0.26	0.16	0.23	0.08	0.22	0.50	0.17	0.38	0.39
s, saturation flow rate [veh/h]	1781	1754	1781	1759	1781	3560	1589	1781	1870	1775
c, Capacity [veh/h]	386	380	247	244	134	1055	471	339	770	731
d1, Uniform Delay [s]	47.03	47.03	51.72	51.72	55.53	38.05	42.25	47.50	33.48	34.10
k, delay calibration	0.50	0.48	0.17	0.36	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	303.13	110.94	90.25	307.53	49.22	4.63	312.97	8.66	18.09	22.83
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.65	1.20	1.17	1.65	1.05	0.74	1.68	0.90	0.92	0.95
d, Delay for Lane Group [s/veh]	350.16	157.97	141.97	359.25	104.76	42.68	355.21	56.16	51.57	56.93
Lane Group LOS	F	F	F	F	F	D	F	E	D	E
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	43.60	22.65	13.38	27.92	5.74	10.49	54.12	9.36	21.96	22.65
50th-Percentile Queue Length [ft/ln]	1090.01	566.21	334.55	697.98	143.38	262.21	1353.01	233.95	549.02	566.18
95th-Percentile Queue Length [veh/ln]	67.35	33.47	20.72	43.76	9.81	15.80	84.31	14.37	29.65	30.45
95th-Percentile Queue Length [ft/ln]	1683.74	836.69	518.12	1093.99	245.30	394.99	2107.86	359.37	741.16	761.30

Movement, Approach, & Intersection Results

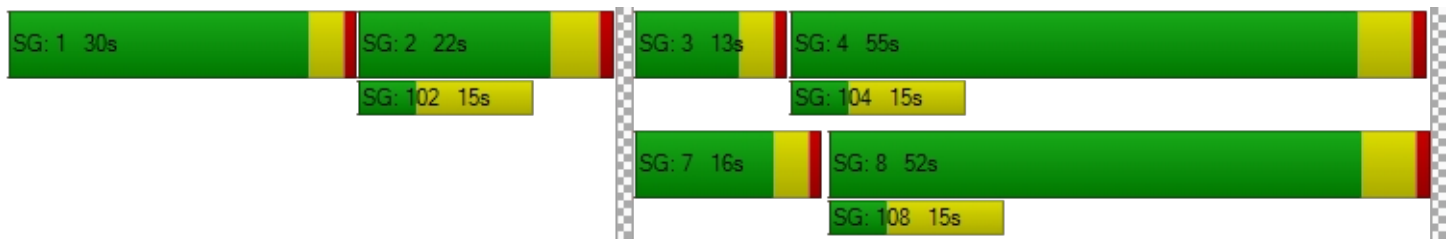
d_M, Delay for Movement [s/veh]	350.16	157.97	157.97	141.97	359.25	359.25	104.76	42.68	355.21	56.16	53.74	56.93
Movement LOS	F	F	F	F	F	F	F	D	F	E	D	E
d_A, Approach Delay [s/veh]	270.01			268.69			192.14			54.57		
Approach LOS	F			F			F			D		
d_I, Intersection Delay [s/veh]	173.48											
Intersection LOS	F											
Intersection V/C	1.254											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	0.00
I_p,int, Pedestrian LOS Score for Intersection	3.147	2.601	3.465	0.000
Crosswalk LOS	C	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	433	278	772	822
d_b, Bicycle Delay [s]	36.82	44.46	22.63	20.83
I_b,int, Bicycle LOS Score for Intersection	3.360	2.700	2.969	2.968
Bicycle LOS	C	B	C	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 17: Matthews Rd @ Palomar Rd

Control Type:	Two-way stop	Delay (sec / veh):	45.2
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.399

Intersection Setup

Name	Palomar Rd		Matthews Rd		Matthews Rd	
Approach	Southbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	0	0
Entry Pocket Length [ft]	100.00	200.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Palomar Rd		Matthews Rd		Matthews Rd	
Base Volume Input [veh/h]	51	173	202	128	274	150
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	83	28	0	19	6
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	56	274	251	141	321	171
Peak Hour Factor	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	71	65	36	83	44
Total Analysis Volume [veh/h]	58	282	259	145	331	176
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.40	0.40	0.00	0.00	0.29	0.00
d_M, Delay for Movement [s/veh]	45.24	13.37	0.00	0.00	9.37	0.00
Movement LOS	E	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.72	1.91	0.00	0.00	1.19	1.19
95th-Percentile Queue Length [ft/ln]	42.95	47.70	0.00	0.00	29.79	29.79
d_A, Approach Delay [s/veh]	18.80		0.00		6.11	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	7.59					
Intersection LOS	E					

Intersection Level Of Service Report
Intersection 18: McLaughlin Rd @ Murrieta Rd

Control Type:	Two-way stop	Delay (sec / veh):	15.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.043

Intersection Setup

Name	Murrieta Rd			Murrieta Rd			McLaughlin Rd			McLaughlin Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔			↔			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	55.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Murrieta Rd			Murrieta Rd			McLaughlin Rd			McLaughlin Rd		
Base Volume Input [veh/h]	2	227	0	7	171	2	4	0	1	3	0	10
Base Volume Adjustment Factor	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	46	0	0	10	2	9	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	364	0	10	250	5	14	0	1	4	0	14
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	96	0	3	66	1	4	0	0	1	0	4
Total Analysis Volume [veh/h]	3	383	0	11	263	5	15	0	1	4	0	15
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.01	0.00	0.00	0.04	0.00	0.00	0.01	0.00	0.02
d_M, Delay for Movement [s/veh]	7.78	0.00	0.00	8.09	0.00	0.00	15.70	15.17	10.11	15.14	14.97	10.64
Movement LOS	A	A	A	A	A	A	C	C	B	C	B	B
95th-Percentile Queue Length [veh/ln]	0.01	0.00	0.00	0.03	0.00	0.00	0.14	0.14	0.14	0.10	0.10	0.10
95th-Percentile Queue Length [ft/ln]	0.17	0.00	0.00	0.71	0.00	0.00	3.44	3.44	3.44	2.60	2.60	2.60
d_A, Approach Delay [s/veh]	0.06			0.32			15.35			11.59		
Approach LOS	A			A			C			B		
d_I, Intersection Delay [s/veh]	0.83											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 19: McLaughlin Rd @ Encanto Dr

Control Type:	Two-way stop	Delay (sec / veh):	14.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.100

Intersection Setup

Name	Encanto Dr		Encanto Dr		McLaughlin Rd	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00		50.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Encanto Dr		Encanto Dr		McLaughlin Rd	
Base Volume Input [veh/h]	174	10	36	181	15	28
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	85	0	0	19	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	192	96	39	199	36	31
Peak Hour Factor	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	58	29	12	60	11	9
Total Analysis Volume [veh/h]	231	116	47	240	43	37
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.04	0.00	0.10	0.05
d_M, Delay for Movement [s/veh]	0.00	0.00	8.09	0.00	14.56	10.98
Movement LOS	A	A	A	A	B	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.12	0.12	0.52	0.52
95th-Percentile Queue Length [ft/ln]	0.00	0.00	3.02	3.02	13.05	13.05
d_A, Approach Delay [s/veh]	0.00		1.32		12.90	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	1.98					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 20: McLaughlin Rd @ Trumble Rd

Control Type:	All-way stop	Delay (sec / veh):	7.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.175

Intersection Setup

Name	Trumble Rd			Trumble Rd			McLaughlin Rd			McLaughlin Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Trumble Rd			Trumble Rd			McLaughlin Rd			McLaughlin Rd		
Base Volume Input [veh/h]	37	1	0	0	3	4	4	0	16	0	0	0
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	4	18	67	0	0	15	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	40	1	0	0	3	8	22	67	18	0	15	0
Peak Hour Factor	0.6900	0.6900	0.6900	0.6900	0.6900	0.6900	0.6900	0.6900	0.6900	0.6900	0.6900	0.6900
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	0	0	0	1	3	8	24	7	0	5	0
Total Analysis Volume [veh/h]	58	1	0	0	4	12	32	97	26	0	22	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	795	916	884	846
Degree of Utilization, x	0.07	0.02	0.18	0.03

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.24	0.05	0.63	0.08
95th-Percentile Queue Length [ft]	6.00	1.33	15.83	2.00
Approach Delay [s/veh]	7.89	7.00	7.93	7.37
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	7.81			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 21: McLaughlin Rd @ Sherman Rd

Control Type:	Two-way stop	Delay (sec / veh):	10.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.274

Intersection Setup

Name	Sherman Rd			Sherman Rd			McLaughlin Rd			Dawson Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Sherman Rd			Sherman Rd			McLaughlin Rd			Dawson Rd		
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	1	0	0	0
Base Volume Adjustment Factor	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	15	67	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	15	67	0	1	0	0	0
Peak Hour Factor	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	15	67	0	1	0	0	0
Total Analysis Volume [veh/h]	0	0	0	0	0	60	268	0	4	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.33	0.00	0.00	7.22	0.00	0.00	10.09	10.58	9.85	8.70	9.33	8.32
Movement LOS	A	A	A	A	A	A	B	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	1.14	1.14	1.14	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	28.47	28.47	28.47	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	2.44			0.00			10.08			8.78		
Approach LOS	A			A			B			A		
d_I, Intersection Delay [s/veh]	8.26											
Intersection LOS	B											

**Intersection Level Of Service Report
Intersection 22: Rouse Rd @ Murrieta Rd**

Control Type:	Two-way stop	Delay (sec / veh):	16.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.070

Intersection Setup

Name	Murrieta Rd			Murrieta Rd			Rouse Rd			Rouse Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	150.00	100.00	100.00	100.00	100.00	100.00	151.00	100.00	250.00	150.00	100.00	150.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Murrieta Rd			Murrieta Rd			Rouse Rd			Rouse Rd		
Base Volume Input [veh/h]	3	188	8	26	165	1	9	8	6	11	2	35
Base Volume Adjustment Factor	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	18	0	4	4	2	9	0	0	0	0	18
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	281	12	40	235	3	22	12	8	16	3	67
Peak Hour Factor	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	72	3	10	61	1	6	3	2	4	1	17
Total Analysis Volume [veh/h]	4	290	12	41	242	3	23	12	8	16	3	69
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.03	0.00	0.00	0.07	0.03	0.01	0.04	0.01	0.09
d_M, Delay for Movement [s/veh]	7.73	0.00	0.00	7.96	0.00	0.00	16.78	14.72	9.56	15.14	14.38	10.29
Movement LOS	A	A	A	A	A	A	C	B	A	C	B	B
95th-Percentile Queue Length [veh/ln]	0.01	0.00	0.00	0.10	0.00	0.00	0.22	0.10	0.03	0.13	0.02	0.30
95th-Percentile Queue Length [ft/ln]	0.23	0.00	0.00	2.52	0.00	0.00	5.61	2.42	0.76	3.37	0.59	7.58
d_A, Approach Delay [s/veh]	0.10			1.14			14.86			11.31		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	2.75											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 23: Rouse Rd @ Encanto Dr

Control Type:	Two-way stop	Delay (sec / veh):	17.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.280

Intersection Setup

Name	Encanto Dr		Encanto Dr		Rouse Rd	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00		50.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Encanto Dr		Encanto Dr		Rouse Rd	
Base Volume Input [veh/h]	170	57	13	149	85	32
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	85	0	0	19	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	273	63	15	183	93	35
Peak Hour Factor	0.7900	0.7900	0.7900	0.7900	0.7900	0.7900
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	86	20	5	58	29	11
Total Analysis Volume [veh/h]	346	80	19	232	118	44
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.02	0.00	0.28	0.07
d_M, Delay for Movement [s/veh]	0.00	0.00	8.23	0.00	17.55	14.46
Movement LOS	A	A	A	A	C	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.05	0.05	1.53	1.53
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.28	1.28	38.18	38.18
d_A, Approach Delay [s/veh]	0.00		0.62		16.71	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	3.41					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 24: McCall Blvd @ Bradley Rd

Control Type:	Signalized	Delay (sec / veh):	23.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.854

Intersection Setup

Name	Bradley Rd			Bradley Rd			McCall Blvd			McCall Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	90.00	100.00	100.00	365.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Bradley Rd			Bradley Rd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	29	35	226	102	46	8	17	277	29	367	293	36
Base Volume Adjustment Factor	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	17	0	0	0	0	25	0	4	6	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	40	49	333	143	65	12	23	413	40	517	416	51
Peak Hour Factor	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	14	95	41	18	3	7	117	11	147	118	14
Total Analysis Volume [veh/h]	45	56	378	163	74	14	26	469	45	588	473	58
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Overlap	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	6	0	5	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	5	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	30	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.2	3.2	0.0	3.0	0.0	3.0	3.6	0.0	3.0	3.6	0.0
All red [s]	0.0	1.0	1.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	38	38	0	9	0	9	33	0	10	34	0
Vehicle Extension [s]	0.0	3.0	3.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	5	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	26	26	0	0	0	0	23	0	0	22	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	2.2	0.0	2.0	0.0	2.0	2.6	0.0	2.0	2.6	0.0
Minimum Recall		No	No		No		No	No		No	No	
Maximum Recall		No	No		No		No	No		No	No	
Pedestrian Recall		No	No		No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	L	C	C	L	C	C
C, Cycle Length [s]	69	69	69	69	69	69	69	69	69	69	69
L, Total Lost Time per Cycle [s]	4.20	4.20	4.00	4.00	4.00	4.00	4.60	4.60	4.00	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20	0.00	2.00	2.00	2.00	2.60	2.60	2.00	2.60	2.60
g_i, Effective Green Time [s]	6	6	35	9	9	2	12	12	25	36	36
g / C, Green / Cycle	0.08	0.08	0.51	0.12	0.12	0.03	0.18	0.18	0.37	0.52	0.52
(v / s)_i Volume / Saturation Flow Rate	0.03	0.03	0.24	0.09	0.05	0.01	0.14	0.14	0.33	0.14	0.14
s, saturation flow rate [veh/h]	1781	1870	1589	1781	1819	1781	1870	1813	1781	1870	1799
c, Capacity [veh/h]	150	157	815	222	227	51	336	325	655	970	933
d1, Uniform Delay [s]	29.64	29.78	10.72	29.05	27.74	32.98	26.93	26.96	20.54	9.33	9.33
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.27	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.11	1.36	0.44	4.67	1.09	7.66	3.85	4.07	10.67	0.15	0.16
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.30	0.36	0.46	0.73	0.39	0.51	0.78	0.78	0.90	0.28	0.28
d, Delay for Lane Group [s/veh]	30.75	31.14	11.15	33.73	28.82	40.64	30.78	31.03	31.21	9.48	9.49
Lane Group LOS	C	C	B	C	C	D	C	C	C	A	A
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.72	0.90	3.28	2.77	1.35	0.52	4.16	4.08	9.81	1.97	1.90
50th-Percentile Queue Length [ft/ln]	18.01	22.57	82.05	69.27	33.70	12.90	103.89	101.88	245.28	49.16	47.39
95th-Percentile Queue Length [veh/ln]	1.30	1.62	5.91	4.99	2.43	0.93	7.48	7.34	14.95	3.54	3.41
95th-Percentile Queue Length [ft/ln]	32.43	40.62	147.69	124.69	60.66	23.22	187.01	183.39	373.71	88.49	85.30

Movement, Approach, & Intersection Results

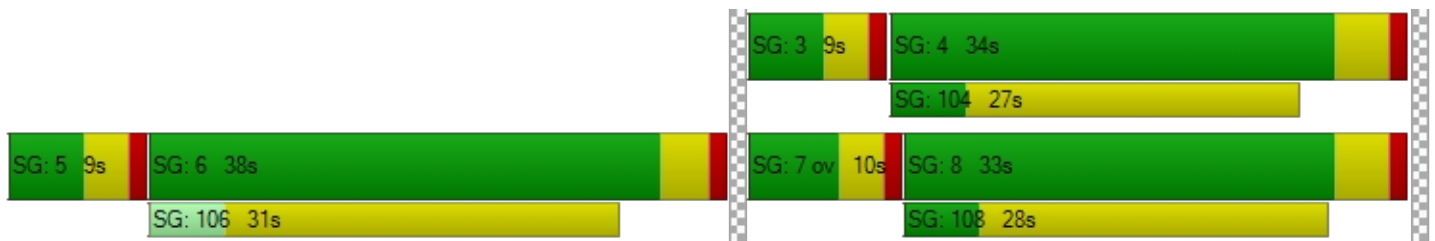
d_M, Delay for Movement [s/veh]	30.75	31.14	11.15	33.73	28.82	28.82	40.64	30.89	31.03	31.21	9.48	9.49
Movement LOS	C	C	B	C	C	C	D	C	C	C	A	A
d_A, Approach Delay [s/veh]	15.33			32.01			31.37			20.90		
Approach LOS	B			C			C			C		
d_I, Intersection Delay [s/veh]	23.32											
Intersection LOS	C											
Intersection V/C	0.854											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	5.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	40.14	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.422	2.069	2.549	0.000
Crosswalk LOS	B	B	B	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	751	111	631	653
d_b, Bicycle Delay [s]	17.55	40.14	21.08	20.40
I_b,int, Bicycle LOS Score for Intersection	2.350	1.974	2.005	2.483
Bicycle LOS	B	A	B	B

Sequence




Ring 1	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 25: McCall Blvd @ I-215 SB

Control Type:	Signalized	Delay (sec / veh):	22.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.794

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	455.00	100.00	100.00	400.00	235.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name				I-215 SB			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	0	0	0	225	0	264	0	667	311	437	898	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0600	1.0600	1.0600	1.0000	1.0600	1.0600	1.0600	1.0600	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	42	0	0	10	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	248	0	292	0	778	342	481	1000	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9500	0.9500	0.9500	1.0000	0.9500	0.9500	0.9500	0.9500	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	65	0	77	0	205	90	127	263	0
Total Analysis Volume [veh/h]	0	0	0	261	0	307	0	819	360	506	1053	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	5	0	0	5	0	5	5	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	3.2	0.0	0.0	3.6	0.0	3.0	3.6	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	39	0	0	41	0	40	81	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	24	0	0	21	0	0	15	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	2.2	0.0	0.0	2.6	0.0	2.0	2.6	0.0
Minimum Recall					No			No		No	No	
Maximum Recall					No			No		No	No	
Pedestrian Recall					No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		C	R	C	R	L	C
C, Cycle Length [s]		73	73	73	73	73	73
L, Total Lost Time per Cycle [s]		4.20	4.20	4.60	4.60	4.00	4.60
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		2.20	2.20	2.60	2.60	2.00	2.60
g_i, Effective Green Time [s]		17	17	21	21	23	48
g / C, Green / Cycle		0.23	0.23	0.28	0.28	0.31	0.65
(v / s)_i Volume / Saturation Flow Rate		0.15	0.19	0.23	0.23	0.28	0.30
s, saturation flow rate [veh/h]		1781	1589	3560	1589	1781	3560
c, Capacity [veh/h]		411	367	1004	448	558	2313
d1, Uniform Delay [s]		25.50	26.98	24.62	24.51	24.22	6.41
k, delay calibration		0.11	0.11	0.11	0.12	0.23	0.11
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		1.63	5.11	1.68	3.67	11.27	0.14
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.64	0.84	0.82	0.80	0.91	0.46
d, Delay for Lane Group [s/veh]		27.14	32.08	26.31	28.18	35.49	6.55
Lane Group LOS		C	C	C	C	D	A
Critical Lane Group		No	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		4.10	5.39	6.37	5.83	9.45	3.06
50th-Percentile Queue Length [ft/ln]		102.60	134.85	159.25	145.66	236.25	76.57
95th-Percentile Queue Length [veh/ln]		7.39	9.20	10.51	9.78	14.49	5.51
95th-Percentile Queue Length [ft/ln]		184.67	230.07	262.73	244.62	362.29	137.83

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	27.14	27.14	32.08	0.00	26.31	28.18	35.49	6.55	0.00
Movement LOS				C	C	C		C	C	D	A	
d_A, Approach Delay [s/veh]	0.00			29.81			26.88			15.94		
Approach LOS	A			C			C			B		
d_I, Intersection Delay [s/veh]	22.23											
Intersection LOS	C											
Intersection V/C	0.794											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.283	0.000	0.000	0.000
Crosswalk LOS	B	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	580	607	1273
d_b, Bicycle Delay [s]	60.00	30.25	29.12	7.92
I_b,int, Bicycle LOS Score for Intersection	4.132	2.497	2.532	2.846
Bicycle LOS	D	B	B	C

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 26: McCall Blvd @ I-215 NB

Control Type:	Signalized	Delay (sec / veh):	25.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.844

Intersection Setup

Name	I-215 NB						McCall Blvd			McCall Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	240.00	100.00	100.00	100.00	250.00	100.00	100.00	100.00	100.00	320.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name	I-215 NB						McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	298	1	253	0	0	0	256	643	0	0	1032	393
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0000	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0000	1.0000	1.0000	1.0600	1.0600	1.0000	1.0000	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	42	0	0	10	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	329	1	279	0	0	0	282	751	0	0	1147	434
Peak Hour Factor	0.9100	0.9100	0.9100	1.0000	1.0000	1.0000	0.9100	0.9100	1.0000	1.0000	0.9100	0.9100
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	90	0	77	0	0	0	77	206	0	0	315	119
Total Analysis Volume [veh/h]	362	1	307	0	0	0	310	825	0	0	1260	477
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	0	0	5	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	0	0	0	5	5	0	0	5	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	3.2	0.0	0.0	0.0	0.0	3.0	3.6	0.0	0.0	3.6	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	16	0	0	0	0	15	44	0	0	29	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	3	0	0	0	0	0	17	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	0.0	0.0	2.0	2.6	0.0	0.0	2.6	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R		L	C	C	R
C, Cycle Length [s]	60	60		60	60	60	60
L, Total Lost Time per Cycle [s]	4.20	4.20		4.00	4.60	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20		2.00	2.60	2.60	2.60
g_i, Effective Green Time [s]	12	12		11	39	24	24
g / C, Green / Cycle	0.20	0.20		0.18	0.66	0.41	0.41
(v / s)_i Volume / Saturation Flow Rate	0.20	0.19		0.17	0.23	0.35	0.30
s, saturation flow rate [veh/h]	1781	1589		1781	3560	3560	1589
c, Capacity [veh/h]	353	315		329	2336	1442	644
d1, Uniform Delay [s]	24.20	24.05		24.27	4.64	16.52	15.25
k, delay calibration	0.11	0.11		0.11	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	30.24	18.48		12.86	0.42	7.60	7.50
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.03	0.98		0.94	0.35	0.87	0.74
d, Delay for Lane Group [s/veh]	54.43	42.53		37.14	5.06	24.12	22.76
Lane Group LOS	F	D		D	A	C	C
Critical Lane Group	Yes	No		Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	7.59	5.62		5.13	1.55	8.17	5.99
50th-Percentile Queue Length [ft/ln]	189.76	140.56		128.17	38.73	204.29	149.73
95th-Percentile Queue Length [veh/ln]	12.28	9.51		8.84	2.79	12.86	10.00
95th-Percentile Queue Length [ft/ln]	307.04	237.77		221.00	69.71	321.49	250.07

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	54.43	54.43	42.53	0.00	0.00	0.00	37.14	5.06	0.00	0.00	24.12	22.76
Movement LOS	F	D	D				D	A			C	C
d_A, Approach Delay [s/veh]	48.98			0.00			13.82			23.75		
Approach LOS	D			A			B			C		
d_I, Intersection Delay [s/veh]	25.34											
Intersection LOS	C											
Intersection V/C	0.844											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.022	0.000	0.000	0.000
Crosswalk LOS	B	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	393	0	1313	813
d_b, Bicycle Delay [s]	19.36	30.00	3.54	10.56
I_b,int, Bicycle LOS Score for Intersection	2.665	4.132	2.496	2.993
Bicycle LOS	B	D	B	C

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 27: McCall Blvd @ Encanto Dr

Control Type:	Signalized	Delay (sec / veh):	48.3
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.836

Intersection Setup

Name	Encanto Dr			Encanto Dr			McCall Blvd			McCall Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	130.00	100.00	130.00	80.00	100.00	100.00	100.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Encanto Dr			Encanto Dr			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	220	22	66	57	18	132	141	662	91	58	1074	57
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	17	0	6	4	10	42	0	0	0	0	25
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	243	41	73	69	24	155	198	729	101	64	1184	88
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	66	11	20	19	7	42	54	198	27	17	322	24
Total Analysis Volume [veh/h]	264	45	79	75	26	168	215	792	110	70	1287	96
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.2	0.0	0.0	3.2	0.0	3.0	3.6	0.0	3.0	3.6	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	31	0	0	31	0	9	20	0	9	20	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	17	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	2.2	0.0	2.0	2.6	0.0	2.0	2.6	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	L	C	C	L	C	C
C, Cycle Length [s]	85	85	85	85	85	85	85	85	85	85	85
L, Total Lost Time per Cycle [s]	4.20	4.20	4.20	4.20	4.20	4.00	4.60	4.60	4.00	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20	2.20	2.20	2.20	2.00	2.60	2.60	2.00	2.60	2.60
g_i, Effective Green Time [s]	30	30	30	30	30	12	38	38	4	30	30
g / C, Green / Cycle	0.35	0.35	0.35	0.35	0.35	0.14	0.45	0.45	0.05	0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.22	0.02	0.05	0.06	0.12	0.12	0.25	0.25	0.04	0.37	0.38
s, saturation flow rate [veh/h]	1189	1870	1589	1361	1622	1781	1870	1791	1781	1870	1825
c, Capacity [veh/h]	366	658	559	504	570	257	833	798	92	661	645
d1, Uniform Delay [s]	31.79	18.26	18.75	21.50	20.24	35.32	17.29	17.30	39.67	27.42	27.42
k, delay calibration	0.17	0.11	0.11	0.11	0.11	0.11	0.22	0.22	0.11	0.48	0.48
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.31	0.04	0.11	0.14	0.35	7.13	1.16	1.21	11.89	50.14	52.70
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.72	0.07	0.14	0.15	0.34	0.84	0.55	0.55	0.76	1.06	1.06
d, Delay for Lane Group [s/veh]	36.10	18.30	18.86	21.64	20.59	42.45	18.45	18.51	51.56	77.55	80.12
Lane Group LOS	D	B	B	C	C	D	B	B	D	F	F
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	5.57	0.58	1.05	1.09	2.79	4.68	6.36	6.11	1.71	21.62	21.55
50th-Percentile Queue Length [ft/ln]	139.27	14.50	26.22	27.14	69.72	117.11	158.98	152.77	42.73	540.42	538.84
95th-Percentile Queue Length [veh/ln]	9.44	1.04	1.89	1.95	5.02	8.23	10.49	10.16	3.08	30.35	30.39
95th-Percentile Queue Length [ft/ln]	236.04	26.10	47.20	48.86	125.50	205.84	262.37	254.12	76.91	758.77	759.69

Movement, Approach, & Intersection Results

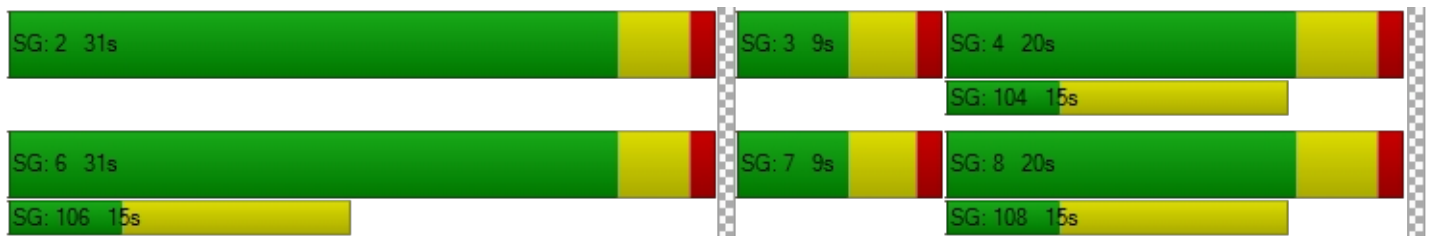
d_M, Delay for Movement [s/veh]	36.10	18.30	18.86	21.64	20.59	20.59	42.45	18.48	18.51	51.56	78.73	80.12
Movement LOS	D	B	B	C	C	C	D	B	B	D	E	F
d_A, Approach Delay [s/veh]	30.53			20.88			23.10			77.51		
Approach LOS	C			C			C			E		
d_I, Intersection Delay [s/veh]	48.30											
Intersection LOS	D											
Intersection V/C	0.836											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			0.0			9.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	21.68			21.68			0.00			21.68		
I_p,int, Pedestrian LOS Score for Intersection	2.257			2.124			0.000			2.933		
Crosswalk LOS	B			B			F			C		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	893			893			513			513		
d_b, Bicycle Delay [s]	9.19			9.19			16.58			16.58		
I_b,int, Bicycle LOS Score for Intersection	2.200			2.003			2.481			2.758		
Bicycle LOS	B			B			B			C		

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 28: Sherman Rd @ Project dwy 1

Control Type:	Two-way stop	Delay (sec / veh):	20.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.030

Intersection Setup

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

Volumes

Name	Sherman Rd		Sherman Rd		Westbound	
Base Volume Input [veh/h]	11	0	0	25	0	0
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	92	32	301	337	7	76
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	105	32	301	366	7	76
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	28	8	79	96	2	20
Total Analysis Volume [veh/h]	111	34	317	385	7	80
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			Yes
Number of Storage Spaces in Median	0	0	1

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.22	0.00	0.03	0.09
d_M, Delay for Movement [s/veh]	0.00	0.00	8.21	0.00	20.83	9.54
Movement LOS	A	A	A	A	C	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.84	0.00	0.39	0.39
95th-Percentile Queue Length [ft/ln]	0.00	0.00	21.10	0.00	9.83	9.83
d_A, Approach Delay [s/veh]	0.00		3.71		10.45	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	3.76					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 29: Sherman Rd @ Project dwy 2

Control Type:	Two-way stop	Delay (sec / veh):	12.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.031

Intersection Setup

Name	Sherman Rd		Sherman Rd		Eastbound	
Approach	Northbound		Southbound			
Lane Configuration	↶		↷		↷	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Sherman Rd		Sherman Rd		Eastbound	
Base Volume Input [veh/h]	0	11	25	0	0	0
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	110	316	28	15	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	123	345	28	15	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	32	91	7	4	0
Total Analysis Volume [veh/h]	2	129	363	29	16	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.03	0.00
d_M, Delay for Movement [s/veh]	8.09	0.00	0.00	0.00	12.11	10.60
Movement LOS	A	A	A	A	B	B
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.00	0.00	0.09	0.09
95th-Percentile Queue Length [ft/ln]	0.13	0.13	0.00	0.00	2.37	2.37
d_A, Approach Delay [s/veh]	0.12		0.00		12.11	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	0.39					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 30: Sherman Rd @ Project dwy 3

Control Type:	Two-way stop	Delay (sec / veh):	20.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.008

Intersection Setup

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

Volumes

Name	Sherman Rd			Sherman Rd								
Base Volume Input [veh/h]	0	11	0	0	25	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	34	32	301	8	8	2	0	0	7	0	76
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	47	32	301	37	8	2	0	0	7	0	76
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	12	8	79	10	2	1	0	0	2	0	20
Total Analysis Volume [veh/h]	1	49	34	317	39	8	2	0	0	7	0	80
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.21	0.00	0.00	0.01	0.00	0.00	0.03	0.00	0.08
d_M, Delay for Movement [s/veh]	7.31	0.00	0.00	8.01	0.00	0.00	20.17	18.74	8.63	18.52	18.90	9.12
Movement LOS	A	A	A	A	A	A	C	C	A	C	C	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.79	0.00	0.00	0.03	0.03	0.03	0.35	0.35	0.35
95th-Percentile Queue Length [ft/ln]	0.05	0.05	0.05	19.76	0.00	0.00	0.63	0.63	0.63	8.81	8.81	8.81
d_A, Approach Delay [s/veh]	0.09			6.97			20.17			9.88		
Approach LOS	A			A			C			A		
d_I, Intersection Delay [s/veh]	6.42											
Intersection LOS	C											

**Intersection Level Of Service Report
Intersection 31: Trumble Rd @ Project dwy 4**

Control Type:	Two-way stop	Delay (sec / veh):	8.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Trumble Rd		Trumble Rd		Project dwy	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Trumble Rd		Trumble Rd		Project dwy	
Base Volume Input [veh/h]	5	0	0	7	0	0
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	9	0	0	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	9	0	7	2	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	2	0	2	1	0
Total Analysis Volume [veh/h]	5	9	0	7	2	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.24	0.00	8.60	8.37
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.15	0.15
d_A, Approach Delay [s/veh]	0.00		0.00		8.60	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.75					
Intersection LOS	A					

**Intersection Level Of Service Report
Intersection 32: Trumble Rd @ Project dwy 5**

Control Type:	Two-way stop	Delay (sec / veh):	8.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Trumble Rd		Trumble Rd		Project dwy	
Approach	Northbound		Southbound		Westbound	
Lane Configuration	↬		↵		↵	
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Trumble Rd		Trumble Rd		Project dwy	
Base Volume Input [veh/h]	5	0	0	7	0	0
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	9	9	0	2	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	14	9	0	9	2	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	2	0	2	1	0
Total Analysis Volume [veh/h]	15	9	0	9	2	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.26	0.00	8.66	8.41
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.15	0.15
d_A, Approach Delay [s/veh]	0.00		0.00		8.66	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.49					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 33: Dawson Rd @ Project dwy 6

Control Type:	Two-way stop	Delay (sec / veh):	9.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.043

Intersection Setup

Name	Dawson Rd		Dawson Rd		Eastbound	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration	↶		↷		↷	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Dawson Rd		Dawson Rd		Eastbound	
Base Volume Input [veh/h]	0	2	4	0	0	0
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	31	104	138	31	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	33	108	138	31	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	9	28	36	8	0
Total Analysis Volume [veh/h]	0	35	114	145	33	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.04	0.00
d_M, Delay for Movement [s/veh]	7.76	0.00	0.00	0.00	9.91	9.42
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.13	0.13
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	3.37	3.37
d_A, Approach Delay [s/veh]	0.00		0.00		9.91	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 34: Dawson Rd @ Project dwy 7

Control Type:	Two-way stop	Delay (sec / veh):	8.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.035

Intersection Setup

Name	Dawson Rd		Dawson Rd		Eastbound	
Approach	Northbound		Southbound			
Lane Configuration	↰		↳		↻	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Dawson Rd		Dawson Rd		Eastbound	
Base Volume Input [veh/h]	0	2	4	0	0	0
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	104	31	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	2	4	104	31	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	1	27	8	0
Total Analysis Volume [veh/h]	0	2	4	109	33	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.03	0.00
d_M, Delay for Movement [s/veh]	7.44	0.00	0.00	0.00	8.94	8.71
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.11	0.11
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	2.71	2.71
d_A, Approach Delay [s/veh]	0.00		0.00		8.94	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.99					
Intersection LOS	A					

Menifee Commerce Center

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Scenario 4 Opening Day PM (2024)

Report File: H:\...\LOS - 2 Opening Day PM.pdf

2021-08-12

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Case Rd/Bonnie Dr @ I-215 SB	Signalized	HCM 6th Edition	SB Thru	0.879	37.4	D
2	SR-74 @ I-215 NB	Signalized	HCM 6th Edition	SEB Left	0.498	9.3	A
3	SR-74 @ Trumble Rd	Signalized	HCM 6th Edition	SEB Left	0.928	45.8	D
4	SR-74 @ Sherman Rd	Signalized	HCM 6th Edition	SB Right	0.752	21.9	C
5	Ethanac Rd @ Murrieta Rd	Signalized	HCM 6th Edition	EB Left	0.726	27.7	C
6	Ethanac Rd @ Case Rd/Barnett Rd	Signalized	HCM 6th Edition	NB Right	0.772	26.4	C
7	Ethanac Rd @ I-215 SB	Signalized	HCM 6th Edition	EB Thru	0.899	48.3	D
8	Ethanac Rd @ I-215 NB	Signalized	HCM 6th Edition	WB Thru	1.283	172.3	F
9	Ethanac Rd @ Encanto Dr	Two-way stop	HCM 6th Edition	NB Left	4.347	1,880.1	F
10	Ethanac Rd @ Trumble Rd	Signalized	HCM 6th Edition	NB Left	0.866	24.2	C
11	Ethanac Rd @ Sherman Rd	Two-way stop	HCM 6th Edition	NB Left	221.482	10,000.0	F
12	Ethanac Rd @ Dawson Rd	Two-way stop	HCM 6th Edition	NB Left	0.995	118.8	F
13	Ethanac Rd @ Antelope Rd	Two-way stop	HCM 6th Edition	NB Left	0.147	20.7	C
14	SR-74 @ Palomar Rd	Signalized	HCM 6th Edition	EB Left	0.764	17.1	B
15	SR-74 @ Menifee Rd	Signalized	HCM 6th Edition	SB Thru	1.036	92.9	F
16	SR-74 @ Briggs Rd	Signalized	HCM 6th Edition	WB Left	0.621	26.3	C
17	Matthews Rd @ Palomar Rd	Two-way stop	HCM 6th Edition	SB Left	0.200	25.9	D
	McLaughlin Rd @ Murrieta		HCM 6th				

18	McLaughlin Rd @ Murrieta Rd	Two-way stop	HCM 6th Edition	EB Left	0.074	28.8	D
19	McLaughlin Rd @ Encanto Dr	Two-way stop	HCM 6th Edition	WB Left	0.182	12.8	B
20	McLaughlin Rd @ Trumble Rd	All-way stop	HCM 6th Edition	NB Left	0.108	7.5	A
21	McLaughlin Rd @ Sherman Rd	Two-way stop	HCM 6th Edition	EB Thru	0.003	10.2	B
22	Rouse Rd @ Murrieta Rd	Two-way stop	HCM 6th Edition	EB Left	0.147	31.9	D
23	Rouse Rd @ Encanto Dr	Two-way stop	HCM 6th Edition	WB Left	0.080	12.7	B
24	McCall Blvd @ Bradley Rd	Signalized	HCM 6th Edition	WB Left	1.066	64.2	E
25	McCall Blvd @ I-215 SB	Signalized	HCM 6th Edition	SB Right	0.919	36.7	D
26	McCall Blvd @ I-215 NB	Signalized	HCM 6th Edition	WB Thru	0.815	22.8	C
27	McCall Blvd @ Encanto Dr	Signalized	HCM 6th Edition	WB Left	0.688	21.9	C
28	Sherman Rd @ Project dwy 1	Two-way stop	HCM 6th Edition	WB Left	0.111	26.3	D
29	Sherman Rd @ Project dwy 2	Two-way stop	HCM 6th Edition	EB Left	0.074	14.3	B
30	Sherman Rd @ Project dwy 3	Two-way stop	HCM 6th Edition	EB Left	0.043	22.9	C
31	Trumble Rd @ Project dwy 4	Two-way stop	HCM 6th Edition	WB Left	0.011	8.7	A
32	Trumble Rd @ Project dwy 5	Two-way stop	HCM 6th Edition	WB Left	0.011	8.8	A
33	Dawson Rd @ Project dwy 6	Two-way stop	HCM 6th Edition	EB Left	0.201	11.0	B
34	Dawson Rd @ Project dwy 7	Two-way stop	HCM 6th Edition	EB Left	0.115	9.2	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Case Rd/Bonnie Dr @ I-215 SB

Control Type:	Signalized	Delay (sec / veh):	37.4
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.879

Intersection Setup

Name	Case Rd		I-215 SB		Bonnie Dr	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration	↵		↵		↵	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1
Entry Pocket Length [ft]	115.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Case Rd		I-215 SB		Bonnie Dr	
Base Volume Input [veh/h]	238	336	899	26	25	317
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	29	0	0	0	0	18
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	292	370	991	29	28	368
Peak Hour Factor	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	78	99	266	8	8	99
Total Analysis Volume [veh/h]	314	398	1066	31	30	396
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing in	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	75
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Overlap	Split	Overlap
Signal Group	1	6	2	2	3	3
Auxiliary Signal Groups				1,2,3,6		1,2,3,6
Lead / Lag	Lag	-	-	-	Lead	-
Minimum Green [s]	5	5	5	5	5	5
Maximum Green [s]	30	30	30	30	30	30
Amber [s]	3.0	4.3	4.3	4.3	4.3	4.3
All red [s]	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	19	56	37	37	19	19
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	5	5	5	5	5
Pedestrian Clearance [s]	0	17	7	7	10	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	3.3	3.3	3.3	3.3	3.3
Minimum Recall	No	No	No	No	No	No
Maximum Recall	No	No	No	No	No	No
Pedestrian Recall	No	No	No	No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	R
C, Cycle Length [s]	75	75	75	75	75	75
L, Total Lost Time per Cycle [s]	4.00	5.30	5.30	5.30	5.30	5.30
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	3.30	3.30	0.00	3.30	0.00
g_i, Effective Green Time [s]	15	59	40	106	5	106
g / C, Green / Cycle	0.20	0.79	0.54	1.41	0.07	1.41
(v / s)_i Volume / Saturation Flow Rate	0.22	0.21	0.57	0.02	0.02	0.25
s, saturation flow rate [veh/h]	1417	1870	1870	1589	1781	1589
c, Capacity [veh/h]	348	1478	1003	2246	122	2246
d1, Uniform Delay [s]	32.22	2.10	17.44	0.00	33.20	0.00
k, delay calibration	0.12	0.50	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.66	0.45	46.60	0.01	1.04	0.17
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	0.71	1.00	0.71
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.90	0.27	1.06	0.01	0.25	0.18
d, Delay for Lane Group [s/veh]	41.88	2.54	64.04	0.01	34.23	0.17
Lane Group LOS	D	A	F	A	C	A
Critical Lane Group	Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	6.37	0.58	26.15	0.01	0.52	0.11
50th-Percentile Queue Length [ft/ln]	159.18	14.58	653.80	0.17	13.00	2.67
95th-Percentile Queue Length [veh/ln]	10.51	1.05	36.23	0.01	0.94	0.19
95th-Percentile Queue Length [ft/ln]	262.64	26.25	905.85	0.31	23.40	4.81

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	41.88	2.54	64.04	0.01	34.23	0.17
Movement LOS	D	A	F	A	C	A
d_A, Approach Delay [s/veh]	19.89		62.23		2.57	
Approach LOS	B		E		A	
d_I, Intersection Delay [s/veh]	37.37					
Intersection LOS	D					
Intersection V/C	0.879					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	29.04	29.04	29.04
I_p,int, Pedestrian LOS Score for Intersection	2.918	2.676	2.755
Crosswalk LOS	C	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1352	845	365
d_b, Bicycle Delay [s]	3.94	12.50	25.05
I_b,int, Bicycle LOS Score for Intersection	2.734	3.370	1.560
Bicycle LOS	B	C	A

Sequence




Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: SR-74 @ I-215 NB

Control Type:	Signalized	Delay (sec / veh):	9.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.498

Intersection Setup

Name	I-215 NB		SR-74		Case Rd	
Approach	Southbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	150.00	245.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	I-215 NB		SR-74		Case Rd	
Base Volume Input [veh/h]	272	32	509	791	8	1186
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	29	0	0	18
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	300	35	590	872	8	1325
Peak Hour Factor	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	80	9	157	232	2	352
Total Analysis Volume [veh/h]	319	37	628	928	9	1410
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing in	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Version 2020 (SP 0-8)

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Permissive	Overlap	Protected	Permissive
Signal Group	7	0	6	6	5	2
Auxiliary Signal Groups				2,5,6,7		
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	5	5	5	5
Maximum Green [s]	30	0	30	30	30	30
Amber [s]	4.3	0.0	4.3	4.3	3.0	4.3
All red [s]	1.0	0.0	1.0	1.0	1.0	1.0
Split [s]	12	0	19	19	29	48
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	3.0
Walk [s]	0	0	5	5	0	5
Pedestrian Clearance [s]	0	0	10	10	0	14
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	3.3	0.0	3.3	3.3	2.0	3.3
Minimum Recall	No		No	No	No	No
Maximum Recall	No		No	No	No	No
Pedestrian Recall	No		No	No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C
C, Cycle Length [s]	53	53	53	53	53
L, Total Lost Time per Cycle [s]	5.30	5.30	4.87	4.00	5.30
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	3.30	3.30	0.00	2.00	3.30
g_i, Effective Green Time [s]	16	22	68	1	26
g / C, Green / Cycle	0.30	0.41	1.28	0.02	0.50
(v / s)_i Volume / Saturation Flow Rate	0.20	0.18	0.58	0.01	0.40
s, saturation flow rate [veh/h]	1759	3560	1589	1417	3560
c, Capacity [veh/h]	527	1457	2042	137	1783
d1, Uniform Delay [s]	16.32	11.23	0.00	26.52	10.94
k, delay calibration	0.11	0.11	0.45	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.53	0.20	0.65	0.20	0.82
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	0.83	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.68	0.43	0.45	0.07	0.79
d, Delay for Lane Group [s/veh]	17.84	11.44	0.65	26.72	11.76
Lane Group LOS	B	B	A	C	B
Critical Lane Group	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.23	1.99	0.37	0.11	4.61
50th-Percentile Queue Length [ft/ln]	80.73	49.75	9.24	2.71	115.14
95th-Percentile Queue Length [veh/ln]	5.81	3.58	0.67	0.20	8.12
95th-Percentile Queue Length [ft/ln]	145.31	89.54	16.63	4.88	203.12

Movement, Approach, & Intersection Results

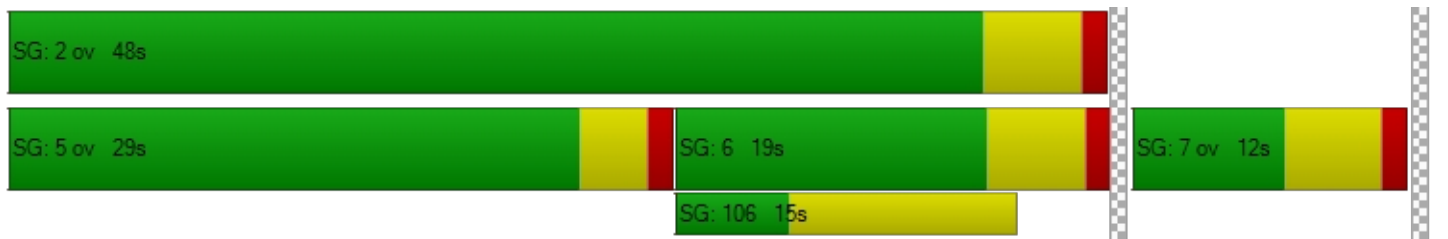
d_M, Delay for Movement [s/veh]	17.84	17.84	11.44	0.65	26.72	11.76
Movement LOS	B	B	B	A	C	B
d_A, Approach Delay [s/veh]	17.84		5.00		11.86	
Approach LOS	B		A		B	
d_I, Intersection Delay [s/veh]	9.30					
Intersection LOS	A					
Intersection V/C	0.498					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	6.7	6.7
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	23.67	23.67
I_p,int, Pedestrian LOS Score for Intersection	2.654	3.245	2.894
Crosswalk LOS	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	223	457	1423
d_b, Bicycle Delay [s]	23.67	17.86	2.49
I_b,int, Bicycle LOS Score for Intersection	2.147	2.843	2.730
Bicycle LOS	B	C	B

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: SR-74 @ Trumble Rd

Control Type:	Signalized	Delay (sec / veh):	45.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.928

Intersection Setup

Name	Trumble		SR-74		SR-74	
Approach	Southwestbound		Northwestbound		Southeastbound	
Lane Configuration	↵↵		↑↑		↵↑↑	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	255.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		Yes	

Volumes

Name	Trumble		SR-74		SR-74	
Base Volume Input [veh/h]	95	415	924	73	343	1127
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	18	0	29	29	0	18
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	123	458	1048	110	378	1260
Peak Hour Factor	0.9900	0.9900	0.9900	0.9900	0.9900	0.9900
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	31	116	265	28	95	318
Total Analysis Volume [veh/h]	124	463	1059	111	382	1273
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing in	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	75
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Protected	Permissive
Signal Group	7	0	6	0	5	2
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	5	0	5	5
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	4.3	0.0	4.3	0.0	3.0	4.3
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	26	0	29	0	18	49
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	10	0	10	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	3.3	0.0	3.3	0.0	2.0	3.3
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C	L	C
C, Cycle Length [s]	75	75	75	75	75	75
L, Total Lost Time per Cycle [s]	5.30	5.30	5.30	5.30	4.00	5.30
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.30	3.30	3.30	3.30	2.00	3.30
g_i, Effective Green Time [s]	23	23	24	24	14	42
g / C, Green / Cycle	0.30	0.30	0.32	0.32	0.19	0.56
(v / s)_i Volume / Saturation Flow Rate	0.07	0.29	0.31	0.32	0.21	0.36
s, saturation flow rate [veh/h]	1781	1589	1870	1809	1781	3560
c, Capacity [veh/h]	539	481	590	571	334	1982
d1, Uniform Delay [s]	19.67	25.82	25.63	25.74	30.55	11.51
k, delay calibration	0.11	0.23	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.22	20.34	34.90	43.93	72.58	1.62
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.23	0.96	0.99	1.02	1.14	0.64
d, Delay for Lane Group [s/veh]	19.89	46.16	60.54	69.67	103.14	13.13
Lane Group LOS	B	D	E	F	F	B
Critical Lane Group	No	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	1.50	9.89	14.84	15.91	12.26	6.08
50th-Percentile Queue Length [ft/ln]	37.42	247.35	371.03	397.76	306.39	152.11
95th-Percentile Queue Length [veh/ln]	2.69	15.05	21.16	22.80	19.18	10.13
95th-Percentile Queue Length [ft/ln]	67.35	376.31	528.98	569.97	479.44	253.25

Movement, Approach, & Intersection Results

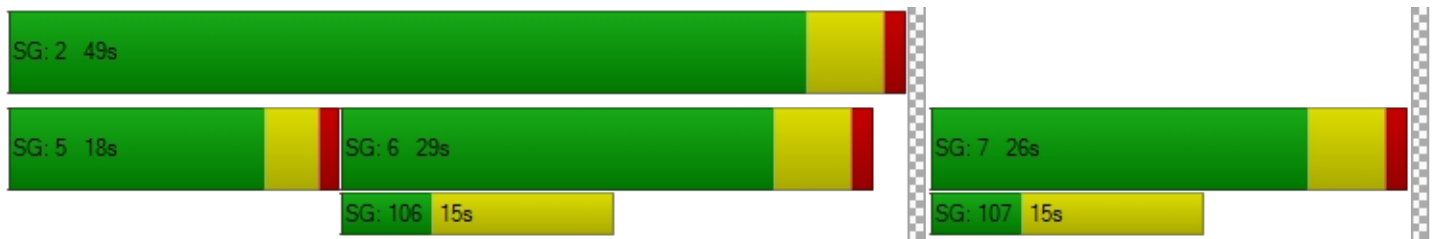
d_M, Delay for Movement [s/veh]	19.89	46.16	64.63	69.67	103.14	13.13
Movement LOS	B	D	E	E	F	B
d_A, Approach Delay [s/veh]	40.61		65.11		33.90	
Approach LOS	D		E		C	
d_I, Intersection Delay [s/veh]	45.76					
Intersection LOS	D					
Intersection V/C	0.928					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	29.04	0.00	29.04
I_p,int, Pedestrian LOS Score for Intersection	2.459	0.000	3.222
Crosswalk LOS	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	552	632	1165
d_b, Bicycle Delay [s]	19.66	17.54	6.53
I_b,int, Bicycle LOS Score for Intersection	1.560	2.525	2.925
Bicycle LOS	A	B	C

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 4: SR-74 @ Sherman Rd**

Control Type:	Signalized	Delay (sec / veh):	21.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.752

Intersection Setup

Name	Sherman Rd			Sherman Rd			SR-74			SR-74		
Approach	Southbound			Northeastbound			Northwestbound			Southeastbound		
Lane Configuration	Y			↶↷			↶↷			↶↷		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	120.00	185.00	100.00	100.00	270.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			40.00			30.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Sherman Rd			Sherman Rd			SR-74			SR-74		
Base Volume Input [veh/h]	23	5	52	27	16	115	87	940	26	16	1182	31
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	58	0	19	12	0	0	0	0	36
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	25	5	57	88	18	146	107	1037	29	18	1303	70
Peak Hour Factor	0.9500	0.9300	0.9300	0.9300	0.9300	0.9500	0.9500	0.9500	0.9500	0.9300	0.9500	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	1	15	24	5	38	28	273	8	5	343	19
Total Analysis Volume [veh/h]	26	5	61	95	19	154	113	1092	31	19	1372	75
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	2	0	0	1	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.2	0.0	3.0	4.3	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	10	0	0	19	0	10	20	0	11	21	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.2	0.0	2.0	3.3	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	63	63	63	63	63	63	63	63	63
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.20	4.20	4.00	5.30	5.30
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.20	2.20	2.00	3.30	3.30
g_i, Effective Green Time [s]	5	8	8	5	32	32	1	27	27
g / C, Green / Cycle	0.07	0.13	0.13	0.08	0.51	0.51	0.02	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.06	0.06	0.10	0.06	0.30	0.30	0.01	0.39	0.39
s, saturation flow rate [veh/h]	1653	1795	1589	1781	1870	1852	1781	1870	1836
c, Capacity [veh/h]	119	241	213	150	958	949	40	810	795
d1, Uniform Delay [s]	28.56	25.08	26.01	28.04	10.66	10.67	30.25	16.49	16.54
k, delay calibration	0.11	0.11	0.11	0.11	0.18	0.18	0.11	0.29	0.29
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	10.01	1.44	4.57	7.33	0.94	0.95	8.29	9.54	10.09
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.77	0.47	0.72	0.75	0.59	0.59	0.47	0.90	0.90
d, Delay for Lane Group [s/veh]	38.57	26.52	30.58	35.37	11.60	11.62	38.53	26.03	26.64
Lane Group LOS	D	C	C	D	B	B	D	C	C
Critical Lane Group	Yes	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.64	1.52	2.27	1.88	4.76	4.73	0.35	9.64	9.65
50th-Percentile Queue Length [ft/ln]	41.08	38.03	56.66	46.93	119.09	118.13	8.76	241.09	241.21
95th-Percentile Queue Length [veh/ln]	2.96	2.74	4.08	3.38	8.34	8.29	0.63	14.74	14.74
95th-Percentile Queue Length [ft/ln]	73.94	68.45	101.99	84.48	208.57	207.25	15.77	368.41	368.56

Movement, Approach, & Intersection Results

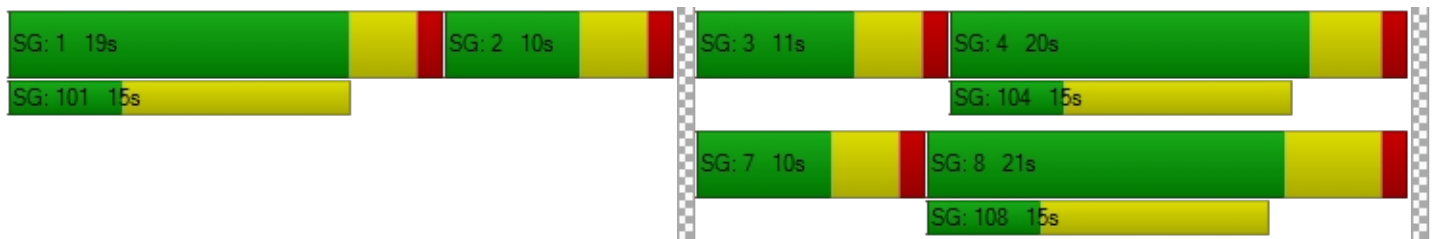
d_M, Delay for Movement [s/veh]	38.57	38.57	38.57	26.52	26.52	30.58	35.37	11.61	11.62	38.53	26.31	26.64
Movement LOS	D	D	D	C	C	C	D	B	B	D	C	C
d_A, Approach Delay [s/veh]	38.57			28.85			13.78			26.49		
Approach LOS	D			C			B			C		
d_I, Intersection Delay [s/veh]	21.93											
Intersection LOS	C											
Intersection V/C	0.752											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	21.68	21.68	0.00
I_p,int, Pedestrian LOS Score for Intersection	1.761	2.121	2.824	0.000
Crosswalk LOS	A	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	200	500	527	523
d_b, Bicycle Delay [s]	24.30	16.88	16.28	16.35
I_b,int, Bicycle LOS Score for Intersection	1.711	2.002	2.579	2.769
Bicycle LOS	A	B	B	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Ethanac Rd @ Murrieta Rd

Control Type:	Signalized	Delay (sec / veh):	27.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.726

Intersection Setup

Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	200.00	100.00	100.00	315.00	100.00	100.00	200.00	100.00	100.00	200.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			No		

Volumes

Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	92	87	177	18	124	8	2	323	103	227	405	8
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	36	6	0	0	0	18	0	58	29	10
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	102	95	231	26	137	8	2	374	113	308	475	18
Peak Hour Factor	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	27	25	60	7	36	2	1	97	29	80	124	5
Total Analysis Volume [veh/h]	106	99	241	27	143	8	2	390	118	321	495	19
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing in		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	1	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	4.3	0.0	3.0	4.7	0.0	3.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	21	0	0	24	0	21	23	0	22	24	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	3.3	0.0	2.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	72	72	72	72	72	72	72	72	72	72	72
L, Total Lost Time per Cycle [s]	4.00	4.00	5.30	5.30	5.30	4.00	5.70	5.70	4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	3.30	3.30	3.30	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	17	17	7	7	7	0	13	13	15	28	28
g / C, Green / Cycle	0.24	0.24	0.10	0.10	0.10	0.00	0.18	0.18	0.21	0.39	0.39
(v / s)_i Volume / Saturation Flow Rate	0.06	0.20	0.02	0.08	0.01	0.00	0.14	0.14	0.18	0.14	0.14
s, saturation flow rate [veh/h]	1781	1662	1781	1870	1589	1781	1870	1724	1781	1870	1846
c, Capacity [veh/h]	425	397	186	195	166	5	338	311	376	728	718
d1, Uniform Delay [s]	22.09	26.12	29.20	31.14	28.91	35.70	28.00	28.09	27.20	15.53	15.53
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.30	5.40	0.36	5.23	0.12	46.53	3.85	4.50	5.52	0.29	0.30
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.25	0.86	0.15	0.73	0.05	0.41	0.78	0.79	0.85	0.36	0.36
d, Delay for Lane Group [s/veh]	22.39	31.52	29.56	36.38	29.02	82.23	31.86	32.58	32.72	15.82	15.83
Lane Group LOS	C	C	C	D	C	F	C	C	C	B	B
Critical Lane Group	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.34	5.54	0.41	2.49	0.12	0.10	4.17	3.97	5.23	2.57	2.54
50th-Percentile Queue Length [ft/ln]	33.48	138.48	10.22	62.20	3.00	2.39	104.24	99.34	130.76	64.17	63.38
95th-Percentile Queue Length [veh/ln]	2.41	9.40	0.74	4.48	0.22	0.17	7.51	7.15	8.98	4.62	4.56
95th-Percentile Queue Length [ft/ln]	60.27	234.98	18.39	111.96	5.40	4.30	187.63	178.81	224.53	115.51	114.08

Movement, Approach, & Intersection Results

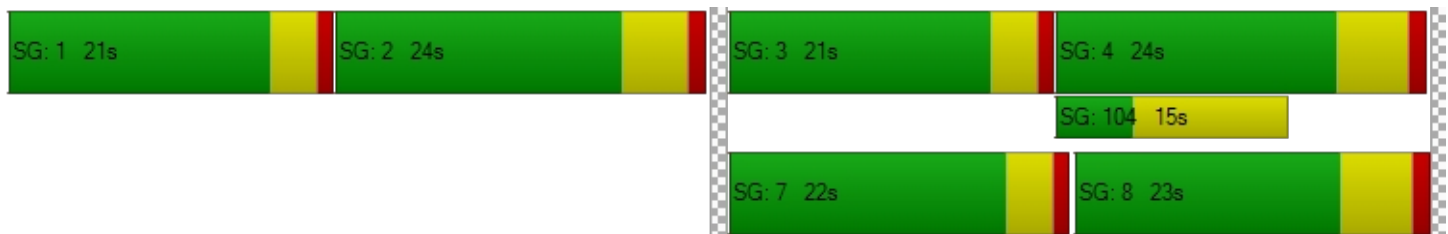
d_M, Delay for Movement [s/veh]	22.39	31.52	31.52	29.56	36.38	29.02	82.23	32.10	32.58	32.72	15.82	15.83
Movement LOS	C	C	C	C	D	C	F	C	C	C	B	B
d_A, Approach Delay [s/veh]	29.35			35.01			32.41			22.32		
Approach LOS	C			D			C			C		
d_I, Intersection Delay [s/veh]	27.67											
Intersection LOS	C											
Intersection V/C	0.726											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			9.0			0.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	0.00			36.45			0.00			0.00		
I_p,int, Pedestrian LOS Score for Intersection	0.000			2.242			0.000			0.000		
Crosswalk LOS	F			B			F			F		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	378			416			384			407		
d_b, Bicycle Delay [s]	29.61			28.24			29.36			28.56		
I_b,int, Bicycle LOS Score for Intersection	2.296			1.853			1.980			2.248		
Bicycle LOS	B			A			A			B		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Ethanac Rd @ Case Rd/Barnett Rd

Control Type:	Signalized	Delay (sec / veh):	26.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.772

Intersection Setup

Name	Barnett Rd			Case Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			⇐⇐⇐			⇐⇐⇐			⇐⇐⇐		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	230.00	100.00	120.00	150.00	100.00	100.00	110.00	100.00	270.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			40.00			30.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Barnett Rd			Case Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	16	4	54	494	0	145	148	501	17	53	461	478
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0000	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0000	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	59	0	0	96	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	18	4	59	545	0	160	163	611	19	58	604	527
Peak Hour Factor	0.9700	0.9700	0.9700	0.9700	1.0000	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	1	15	140	0	41	42	157	5	15	156	136
Total Analysis Volume [veh/h]	19	4	61	562	0	165	168	630	20	60	623	543
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Permiss	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	7	0	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	0	5	0	5	0	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	30	0	0	30	30	0	30	30	0
Amber [s]	0.0	3.2	0.0	3.0	0.0	0.0	3.0	3.2	0.0	3.0	4.7	0.0
All red [s]	0.0	1.0	0.0	1.0	0.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	10	0	34	0	0	9	30	0	16	37	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	0.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	5	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	10	0	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No		No				No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	0.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	2.0	0.0	0.0	2.0	2.2	0.0	2.0	3.7	0.0
Minimum Recall		No		No			No	No		No	No	
Maximum Recall		No		No			No	No		No	No	
Pedestrian Recall		No		No			No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	R	L	C	R	L	C	R
C, Cycle Length [s]	76	76	76	76	76	76	76	76	76
L, Total Lost Time per Cycle [s]	4.20	4.00	4.00	4.00	4.20	4.20	4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.00	2.00	2.00	2.20	2.20	2.00	3.70	3.70
g_i, Effective Green Time [s]	5	16	16	9	35	35	4	28	28
g / C, Green / Cycle	0.07	0.21	0.21	0.12	0.46	0.46	0.05	0.37	0.37
(v / s)_i Volume / Saturation Flow Rate	0.05	0.16	0.06	0.09	0.18	0.01	0.03	0.17	0.34
s, saturation flow rate [veh/h]	1641	3459	2813	1781	3560	1589	1781	3560	1589
c, Capacity [veh/h]	108	716	583	213	1649	736	85	1321	590
d1, Uniform Delay [s]	34.85	28.46	25.32	32.43	13.28	11.07	35.59	18.17	22.77
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.32
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	11.17	1.94	0.26	6.36	0.15	0.01	10.38	0.26	15.67
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.78	0.78	0.28	0.79	0.38	0.03	0.71	0.47	0.92
d, Delay for Lane Group [s/veh]	46.01	30.40	25.58	38.79	13.42	11.08	45.96	18.43	38.44
Lane Group LOS	D	C	C	D	B	B	D	B	D
Critical Lane Group	Yes	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.82	4.67	1.19	3.27	3.25	0.17	1.25	3.61	10.34
50th-Percentile Queue Length [ft/ln]	45.47	116.63	29.74	81.84	81.24	4.33	31.28	90.18	258.53
95th-Percentile Queue Length [veh/ln]	3.27	8.21	2.14	5.89	5.85	0.31	2.25	6.49	15.62
95th-Percentile Queue Length [ft/ln]	81.84	205.19	53.53	147.32	146.23	7.80	56.31	162.32	390.38

Movement, Approach, & Intersection Results

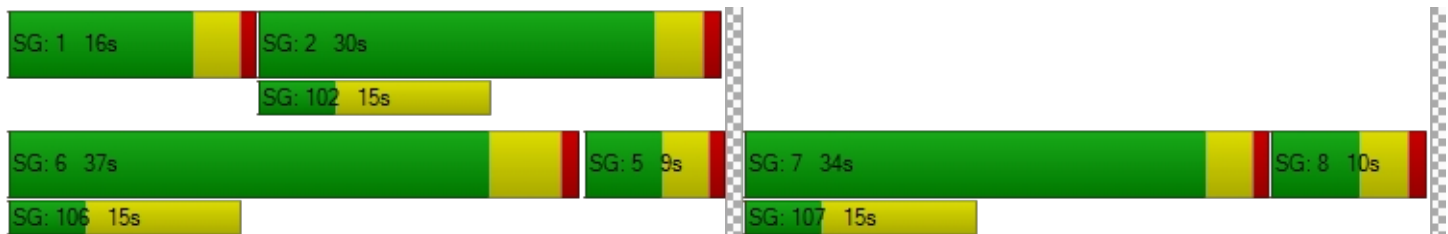
d_M, Delay for Movement [s/veh]	46.01	46.01	46.01	30.40	0.00	25.58	38.79	13.42	11.08	45.96	18.43	38.44
Movement LOS	D	D	D	C		C	D	B	B	D	B	D
d_A, Approach Delay [s/veh]	46.01			29.30			18.57			28.64		
Approach LOS	D			C			B			C		
d_I, Intersection Delay [s/veh]	26.44											
Intersection LOS	C											
Intersection V/C	0.772											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	0.00
I_p,int, Pedestrian LOS Score for Intersection	1.796	2.676	2.718	0.000
Crosswalk LOS	A	B	B	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	129	667	573	696
d_b, Bicycle Delay [s]	39.39	20.00	22.90	19.14
I_b,int, Bicycle LOS Score for Intersection	1.698	1.560	2.234	2.571
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 7: Ethanac Rd @ I-215 SB**

Control Type:	Signalized	Delay (sec / veh):	48.3
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.899

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	240.00	100.00	100.00	100.00	275.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			45.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name				I-215 SB			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	0	0	0	112	2	281	0	525	374	109	642	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0600	1.0600	1.0600	1.0000	1.0600	1.0600	1.0600	1.0600	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0600	1.0600	1.0600	1.0000	1.0600	1.0600	1.0600	1.0600	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	234	0	0	0	59	0	258	96	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	360	2	316	0	649	420	381	818	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9600	0.9600	0.9600	1.0000	0.9600	0.9600	0.9600	0.9600	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	94	1	82	0	169	109	99	213	0
Total Analysis Volume [veh/h]	0	0	0	375	2	329	0	676	438	397	852	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	70
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	5	0	0	5	0	5	5	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	4.3	0.0	0.0	4.7	0.0	3.0	4.7	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	21	0	0	32	0	17	49	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	10	0	0	10	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	3.3	0.0	0.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall					No			No		No	No	
Maximum Recall					No			No		No	No	
Pedestrian Recall					No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		C	R	C	R	L	C
C, Cycle Length [s]		70	70	70	70	70	70
L, Total Lost Time per Cycle [s]		5.30	5.30	5.70	5.70	4.00	5.70
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		3.30	3.30	3.70	3.70	2.00	3.70
g_i, Effective Green Time [s]		16	16	21	21	18	43
g / C, Green / Cycle		0.22	0.22	0.31	0.31	0.26	0.62
(v / s)_i Volume / Saturation Flow Rate		0.21	0.21	0.36	0.28	0.22	0.24
s, saturation flow rate [veh/h]		1781	1589	1870	1589	1781	3560
c, Capacity [veh/h]		400	357	571	486	456	2202
d1, Uniform Delay [s]		26.74	26.58	24.35	23.35	24.98	6.71
k, delay calibration		0.11	0.11	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		11.09	9.96	99.32	22.55	5.28	0.51
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.94	0.92	1.18	0.90	0.87	0.39
d, Delay for Lane Group [s/veh]		37.83	36.55	123.68	45.90	30.26	7.22
Lane Group LOS		D	D	F	D	C	A
Critical Lane Group		Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		6.75	5.77	23.75	8.91	6.14	2.19
50th-Percentile Queue Length [ft/ln]		168.65	144.28	593.83	222.86	153.38	54.78
95th-Percentile Queue Length [veh/ln]		11.01	9.71	35.08	13.81	10.20	3.94
95th-Percentile Queue Length [ft/ln]		275.14	242.78	876.93	345.28	254.94	98.60

Movement, Approach, & Intersection Results

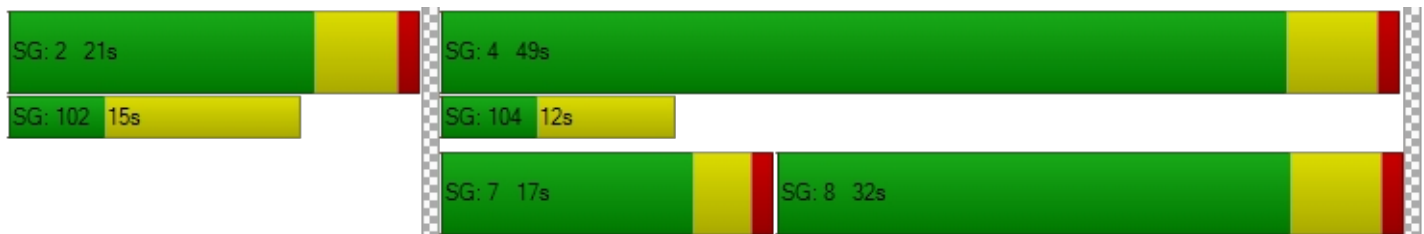
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	37.83	37.83	36.55	0.00	123.68	45.90	30.26	7.22	0.00
Movement LOS				D	D	D		F	D	C	A	
d_A, Approach Delay [s/veh]	0.00			37.23			93.10			14.55		
Approach LOS	A			D			F			B		
d_I, Intersection Delay [s/veh]	48.28											
Intersection LOS	D											
Intersection V/C	0.899											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	26.58	0.00	26.58
I_p,int, Pedestrian LOS Score for Intersection	0.000	2.220	0.000	3.054
Crosswalk LOS	F	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	449	751	1237
d_b, Bicycle Delay [s]	35.00	21.06	13.64	5.09
I_b,int, Bicycle LOS Score for Intersection	4.132	2.725	3.398	2.590
Bicycle LOS	D	B	C	B

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 8: Ethanac Rd @ I-215 NB**

Control Type:	Signalized	Delay (sec / veh):	172.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.283

Intersection Setup

Name	I-215 NB						Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	265.00	100.00	100.00	100.00	245.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name	I-215 NB						Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	388	2	187	0	0	0	228	417	0	0	357	147
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0000	1.0000	1.0000	1.0600	1.0600	1.0000	1.0000	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0000	1.0000	1.0000	1.0600	1.0600	1.0000	1.0000	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	166	0	0	0	0	293	0	0	354	363
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	436	2	376	0	0	0	257	762	0	0	755	528
Peak Hour Factor	0.9400	0.9400	0.9400	1.0000	1.0000	1.0000	0.9400	0.9400	1.0000	1.0000	0.9400	0.9400
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	116	1	100	0	0	0	68	203	0	0	201	140
Total Analysis Volume [veh/h]	464	2	400	0	0	0	273	811	0	0	803	562
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	0	0	0	5	5	0	0	5	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	3.2	0.0	0.0	0.0	0.0	3.0	4.7	0.0	0.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	27	0	0	0	0	17	93	0	0	76	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	7	0	0	0	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	0.0	0.0	2.0	3.7	0.0	0.0	3.7	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R		L	C	C
C, Cycle Length [s]	120	120		120	120	120
L, Total Lost Time per Cycle [s]	4.20	4.20		4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20		2.00	3.70	3.70
g_i, Effective Green Time [s]	23	23		21	87	63
g / C, Green / Cycle	0.19	0.19		0.17	0.73	0.52
(v / s)_i Volume / Saturation Flow Rate	0.26	0.25		0.15	0.43	0.78
s, saturation flow rate [veh/h]	1781	1589		1781	1870	1743
c, Capacity [veh/h]	339	302		305	1360	911
d1, Uniform Delay [s]	48.58	48.58		48.66	7.88	28.63
k, delay calibration	0.48	0.45		0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	186.03	164.90		9.11	1.93	229.88
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.38	1.32		0.90	0.60	1.50
d, Delay for Lane Group [s/veh]	234.61	213.48		57.77	9.81	258.51
Lane Group LOS	F	F		E	A	F
Critical Lane Group	Yes	No		Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	27.59	22.84		8.45	8.31	81.32
50th-Percentile Queue Length [ft/ln]	689.74	571.11		211.35	207.75	2032.88
95th-Percentile Queue Length [veh/ln]	41.90	34.93		13.22	13.04	124.07
95th-Percentile Queue Length [ft/ln]	1047.42	873.31		330.56	325.94	3101.84

Movement, Approach, & Intersection Results

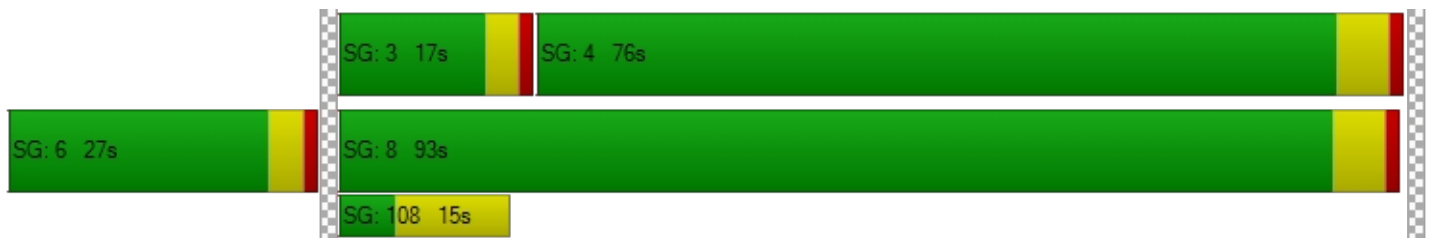
d_M, Delay for Movement [s/veh]	234.61	234.61	213.48	0.00	0.00	0.00	57.77	9.81	0.00	0.00	258.51	258.51
Movement LOS	F	F	F				E	A			F	F
d_A, Approach Delay [s/veh]	224.85			0.00			21.89			258.51		
Approach LOS	F			A			C			F		
d_I, Intersection Delay [s/veh]	172.34											
Intersection LOS	F											
Intersection V/C	1.283											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.152	0.000	0.000	0.000
Crosswalk LOS	B	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	380	0	1455	1172
d_b, Bicycle Delay [s]	39.37	60.00	4.46	10.29
I_b,int, Bicycle LOS Score for Intersection	2.989	4.132	3.348	3.812
Bicycle LOS	C	D	C	D

Sequence

Ring 1	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 9: Ethanac Rd @ Encanto Dr

Control Type:	Two-way stop	Delay (sec / veh):	1,880.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	4.347

Intersection Setup

Name	Encanto Dr		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Encanto Dr		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	115	78	468	126	50	380
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	459	0	0	718
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	129	88	985	142	56	1145
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	34	23	259	37	15	301
Total Analysis Volume [veh/h]	136	93	1037	149	59	1205
Pedestrian Volume [ped/h]	0		0		0	

Version 2020 (SP 0-8)

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	4.35	0.37	0.01	0.00	0.10	0.01
d_M, Delay for Movement [s/veh]	1880.10	1779.21	0.00	0.00	11.79	0.00
Movement LOS	F	F	A	A	B	A
95th-Percentile Queue Length [veh/ln]	25.87	25.87	0.00	0.00	0.33	0.00
95th-Percentile Queue Length [ft/ln]	646.76	646.76	0.00	0.00	8.31	0.00
d_A, Approach Delay [s/veh]	1839.13		0.00		0.55	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	157.47					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 10: Ethanac Rd @ Trumble Rd

Control Type:	Signalized	Delay (sec / veh):	24.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.866

Intersection Setup

Name	Trumble Rd			Trumble Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↑			↵↑			↵↑↵			↵↑		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	85.00	100.00	100.00	100.00	100.00	100.00	155.00	100.00	100.00	110.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Trumble Rd			Trumble Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	4	0	4	13	0	108	73	488	7	4	325	13
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	459	0	0	718	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	0	4	15	0	121	82	1007	7	4	1084	15
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	1	4	0	32	22	265	2	1	285	4
Total Analysis Volume [veh/h]	4	0	4	16	0	127	86	1060	7	4	1141	16
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	0	5	5	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.2	0.0	3.0	3.2	0.0	3.0	4.7	0.0	3.0	4.7	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	18	20	0	9	11	0	9	47	0	44	82	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	5	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	10	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.2	0.0	2.0	2.2	0.0	2.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.20	4.00	4.20	4.00	5.70	5.70	4.00	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.20	2.00	2.20	2.00	3.70	3.70	2.00	3.70
g_i, Effective Green Time [s]	1	10	2	11	7	89	89	1	83
g / C, Green / Cycle	0.01	0.08	0.02	0.10	0.06	0.74	0.74	0.01	0.69
(v / s)_i Volume / Saturation Flow Rate	0.00	0.00	0.01	0.08	0.05	0.57	0.00	0.00	0.62
s, saturation flow rate [veh/h]	1781	1589	1781	1589	1781	1870	1589	1781	1865
c, Capacity [veh/h]	11	132	32	152	109	1390	1181	11	1284
d1, Uniform Delay [s]	59.43	50.57	58.40	53.40	55.60	9.14	3.98	59.43	15.37
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	18.97	0.09	11.19	11.48	11.86	4.01	0.01	18.97	10.37
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.36	0.03	0.49	0.84	0.79	0.76	0.01	0.36	0.90
d, Delay for Lane Group [s/veh]	78.40	50.66	69.59	64.88	67.45	13.15	3.98	78.40	25.74
Lane Group LOS	E	D	E	E	E	B	A	E	C
Critical Lane Group	Yes	No	No	Yes	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.18	0.11	0.58	4.25	2.84	13.14	0.04	0.18	23.77
50th-Percentile Queue Length [ft/ln]	4.48	2.86	14.57	106.21	71.12	328.53	0.91	4.39	594.19
95th-Percentile Queue Length [veh/ln]	0.32	0.21	1.05	7.63	5.12	19.09	0.07	0.32	31.76
95th-Percentile Queue Length [ft/ln]	8.07	5.15	26.23	190.72	128.02	477.15	1.63	7.90	794.07

Movement, Approach, & Intersection Results

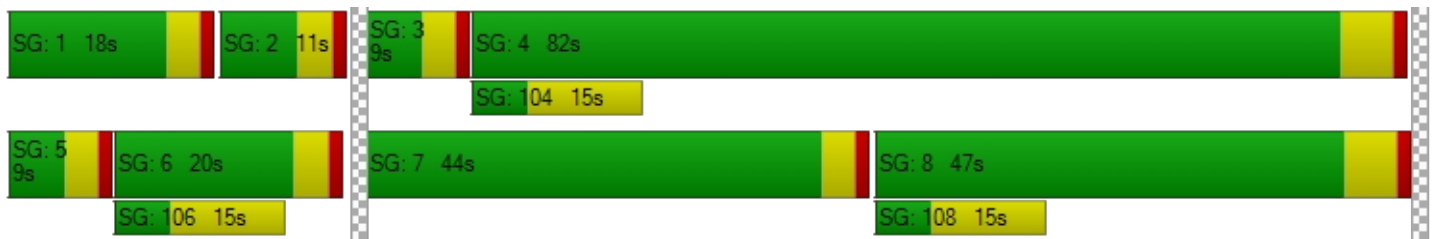
d_M, Delay for Movement [s/veh]	78.40	50.66	50.66	69.59	64.88	64.88	67.45	13.15	3.98	78.40	25.74	25.74
Movement LOS	E	D	D	E	E	E	E	B	A	E	C	C
d_A, Approach Delay [s/veh]	64.53			65.40			17.14			25.92		
Approach LOS	E			E			B			C		
d_I, Intersection Delay [s/veh]	24.23											
Intersection LOS	C											
Intersection V/C	0.866											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	0.00	51.34
l_p,int, Pedestrian LOS Score for Intersection	1.962	2.035	0.000	3.169
Crosswalk LOS	A	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	263	113	688	1272
d_b, Bicycle Delay [s]	45.24	53.39	25.81	7.96
l_b,int, Bicycle LOS Score for Intersection	1.573	1.796	3.462	3.475
Bicycle LOS	A	A	C	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 11: Ethanac Rd @ Sherman Rd

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	221.482

Intersection Setup

Name	Sherman Rd			Sherman Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Sherman Rd			Sherman Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	19	8	5	3	5	90	139	349	3	9	230	1
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	522	56	83	13	34	0	0	125	334	52	195	21
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	543	64	88	16	39	101	156	517	337	63	454	22
Peak Hour Factor	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	144	17	23	4	10	27	41	138	90	17	121	6
Total Analysis Volume [veh/h]	578	68	94	17	41	107	166	550	359	67	483	23
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	221.48	1.29	0.22	0.00	0.99	0.19	0.16	0.01	0.00	0.09	0.00	0.00
d_M, Delay for Movement [s/veh]	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	9.03	0.00	0.00	10.28	0.00	0.00
Movement LOS	F	F	F	F	F	F	A	A	A	B	A	A
95th-Percentile Queue Length [veh/ln]	95.01	95.01	95.01	23.28	23.28	23.28	0.56	0.56	0.56	0.29	0.29	0.29
95th-Percentile Queue Length [ft/ln]	2375.15	2375.15	2375.15	582.06	582.06	582.06	13.88	13.88	13.88	7.34	7.34	7.34
d_A, Approach Delay [s/veh]	10000.00			10000.00			1.39			1.20		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	3545.71											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 12: Ethanac Rd @ Dawson Rd

Control Type:	Two-way stop	Delay (sec / veh):	118.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.995

Intersection Setup

Name	Dawson Rd		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Dawson Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	1	351	2	3	240
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	216	32	83	138	20	52
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	216	33	477	140	23	321
Peak Hour Factor	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	61	9	136	40	7	91
Total Analysis Volume [veh/h]	245	38	542	159	26	365
Pedestrian Volume [ped/h]	0		0		0	

Version 2020 (SP 0-8)

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.99	0.08	0.01	0.00	0.03	0.00
d_M, Delay for Movement [s/veh]	118.76	111.54	0.00	0.00	9.14	0.00
Movement LOS	F	F	A	A	A	A
95th-Percentile Queue Length [veh/ln]	11.57	11.57	0.00	0.00	0.09	0.09
95th-Percentile Queue Length [ft/ln]	289.25	289.25	0.00	0.00	2.24	2.24
d_A, Approach Delay [s/veh]	117.79		0.00		0.61	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	24.42					
Intersection LOS	F					

**Intersection Level Of Service Report
Intersection 13: Ethanac Rd @ Antelope Rd**

Control Type:	Two-way stop	Delay (sec / veh):	20.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.147

Intersection Setup

Name	Antelope Rd			Ethanac Rd			Matthews Rd			Antelope Rd		
Approach	Northbound			Eastbound			Westbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	250.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			50.00			50.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Antelope Rd			Ethanac Rd			Matthews Rd			Antelope Rd		
Base Volume Input [veh/h]	33	0	15	1	304	13	7	207	8	14	0	0
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0000	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	115	0	0	71	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	36	0	17	1	450	15	7	299	8	16	0	0
Peak Hour Factor	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	0	5	0	126	4	2	84	2	4	0	0
Total Analysis Volume [veh/h]	40	0	19	1	506	17	8	336	9	18	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Free	Free	Stop
Flared Lane	No			No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No			No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.15	0.00	0.03	0.00	0.01	0.00	0.01	0.00	0.00	0.07	0.00	0.00
d_M, Delay for Movement [s/veh]	20.65	19.96	13.77	7.97	0.00	0.00	8.48	0.00	0.00	20.15	18.82	11.19
Movement LOS	C	C	B	A	A	A	A	A	A	C	C	B
95th-Percentile Queue Length [veh/ln]	0.65	0.65	0.65	0.00	0.00	0.00	0.02	0.02	0.02	0.23	0.23	0.23
95th-Percentile Queue Length [ft/ln]	16.22	16.22	16.22	0.06	0.06	0.00	0.58	0.58	0.58	5.64	5.64	5.64
d_A, Approach Delay [s/veh]	18.43			0.02			0.19			20.15		
Approach LOS	C			A			A			C		
d_I, Intersection Delay [s/veh]	1.60											
Intersection LOS	C											

**Intersection Level Of Service Report
Intersection 14: SR-74 @ Palomar Rd**

Control Type:	Signalized	Delay (sec / veh):	17.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.764

Intersection Setup

Name	Palomar Rd			Palomar Rd			SR-74			SR-74		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	200.00	100.00	200.00	190.00	100.00	100.00	240.00	100.00	100.00	230.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Palomar Rd			Palomar Rd			SR-74			SR-74		
Base Volume Input [veh/h]	30	66	160	15	38	22	42	1072	12	98	926	28
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	10	77	0	6	0	0	0	0	47	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	33	83	253	17	48	24	47	1182	13	155	1021	31
Peak Hour Factor	0.9500	0.9600	0.9600	0.9600	0.9600	0.9500	0.9500	0.9500	0.9500	0.9600	0.9500	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	22	66	4	13	6	12	311	3	40	269	8
Total Analysis Volume [veh/h]	35	86	264	18	50	25	49	1244	14	161	1075	32
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	4.3	0.0	0.0	4.3	0.0	3.0	4.3	0.0	3.0	4.3	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	30	0	0	30	0	30	30	0	30	30	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.3	0.0	0.0	3.3	0.0	2.0	3.3	0.0	2.0	3.3	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	54	54	54	54	54	54	54	54	54	54	54	54
L, Total Lost Time per Cycle [s]	5.30	5.30	5.30	5.30	5.30	5.30	4.00	5.30	5.30	4.00	5.30	5.30
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.30	3.30	3.30	3.30	3.30	3.30	2.00	3.30	3.30	2.00	3.30	3.30
g_i, Effective Green Time [s]	11	11	11	11	11	11	3	21	21	6	25	25
g / C, Green / Cycle	0.21	0.21	0.21	0.21	0.21	0.21	0.05	0.40	0.40	0.12	0.47	0.47
(v / s)_i Volume / Saturation Flow Rate	0.03	0.05	0.17	0.01	0.02	0.02	0.03	0.34	0.34	0.09	0.30	0.30
s, saturation flow rate [veh/h]	1324	1870	1589	1311	1870	1671	1781	1870	1863	1781	1870	1851
c, Capacity [veh/h]	343	396	337	314	396	354	86	743	740	213	876	867
d1, Uniform Delay [s]	19.61	17.54	20.07	20.30	17.08	17.11	25.07	14.75	14.75	22.94	10.82	10.83
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.14	0.14	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.13	0.27	4.03	0.08	0.10	0.13	5.72	3.67	3.70	5.36	0.77	0.78
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.10	0.22	0.78	0.06	0.10	0.10	0.57	0.85	0.85	0.75	0.63	0.64
d, Delay for Lane Group [s/veh]	19.74	17.81	24.10	20.38	17.18	17.24	30.79	18.42	18.45	28.30	11.59	11.60
Lane Group LOS	B	B	C	C	B	B	C	B	B	C	B	B
Critical Lane Group	No	No	Yes	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.34	0.77	2.97	0.18	0.33	0.32	0.67	5.92	5.91	2.01	3.65	3.62
50th-Percentile Queue Length [ft/ln]	8.41	19.24	74.37	4.41	8.22	8.10	16.84	148.07	147.73	50.33	91.20	90.45
95th-Percentile Queue Length [veh/ln]	0.61	1.39	5.35	0.32	0.59	0.58	1.21	9.91	9.90	3.62	6.57	6.51
95th-Percentile Queue Length [ft/ln]	15.13	34.64	133.87	7.94	14.80	14.58	30.30	247.85	247.39	90.59	164.17	162.81

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	19.74	17.81	24.10	20.38	17.20	17.24	30.79	18.44	18.45	28.30	11.60	11.60
Movement LOS	B	B	C	C	B	B	C	B	B	C	B	B
d_A, Approach Delay [s/veh]	22.30			17.83			18.90			13.72		
Approach LOS	C			B			B			B		
d_I, Intersection Delay [s/veh]	17.14											
Intersection LOS	B											
Intersection V/C	0.764											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.480	2.228	3.065	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	549	549	549	549
d_b, Bicycle Delay [s]	23.69	23.69	23.69	23.69
I_b,int, Bicycle LOS Score for Intersection	2.195	1.636	2.638	2.606
Bicycle LOS	B	A	B	B

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: SR-74 @ Menifee Rd

Control Type:	Signalized	Delay (sec / veh):	92.9
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.036

Intersection Setup

Name	Menifee Rd			Menifee Rd			SR-74			SR-74		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	350.00	100.00	100.00	350.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Menifee Rd			Menifee Rd			SR-74			SR-74		
Base Volume Input [veh/h]	82	158	283	101	175	20	45	1080	102	229	888	93
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	12	19	58	0	0	36	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	90	174	312	111	193	34	69	1248	112	252	1015	103
Peak Hour Factor	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	23	45	81	29	50	9	18	325	29	66	264	27
Total Analysis Volume [veh/h]	94	181	325	116	201	35	72	1300	117	263	1057	107
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	1	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.9	0.0	0.0	3.9	0.0	3.0	4.7	0.0	3.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	25	0	10	50	0	19	59	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.9	0.0	0.0	2.9	0.0	2.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.90	4.90	4.90	4.00	5.70	5.70	4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.90	2.90	2.90	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	21	21	20	6	39	39	20	53	53
g / C, Green / Cycle	0.18	0.18	0.17	0.05	0.33	0.33	0.17	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.15	0.20	0.19	0.04	0.38	0.39	0.15	0.32	0.32
s, saturation flow rate [veh/h]	1839	1589	1808	1781	1870	1816	1781	1870	1810
c, Capacity [veh/h]	323	280	301	92	615	598	296	830	803
d1, Uniform Delay [s]	47.93	49.46	50.04	56.26	40.27	40.27	48.94	27.12	27.21
k, delay calibration	0.14	0.30	0.27	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.11	94.47	94.81	13.41	90.57	94.69	8.85	5.12	5.40
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.85	1.16	1.17	0.78	1.16	1.17	0.89	0.71	0.72
d, Delay for Lane Group [s/veh]	56.04	143.93	144.85	69.67	130.84	134.96	57.79	32.24	32.61
Lane Group LOS	E	F	F	E	F	F	E	C	C
Critical Lane Group	No	Yes	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	8.53	15.53	16.74	2.43	32.52	32.28	8.13	13.88	13.63
50th-Percentile Queue Length [ft/ln]	213.36	388.20	418.44	60.78	813.08	806.93	203.37	347.08	340.76
95th-Percentile Queue Length [veh/ln]	13.33	23.63	25.26	4.38	46.12	46.01	12.81	19.99	19.69
95th-Percentile Queue Length [ft/ln]	333.13	590.72	631.39	109.40	1153.12	1150.37	320.31	499.85	492.13

Movement, Approach, & Intersection Results

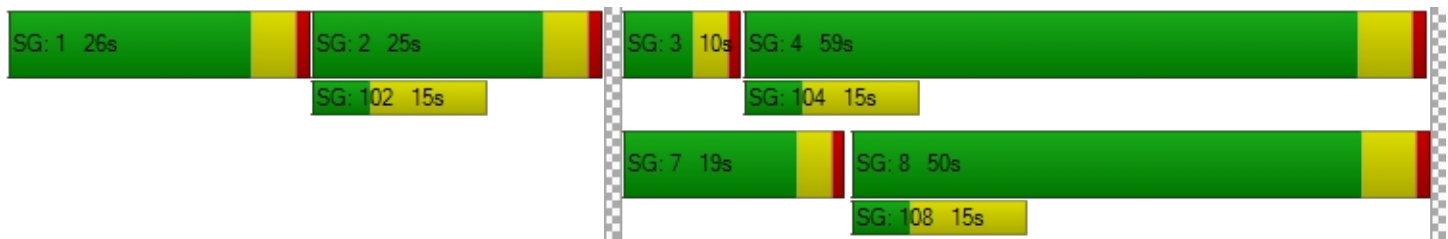
d_M, Delay for Movement [s/veh]	56.04	56.04	143.93	144.85	144.85	144.85	69.67	132.69	134.96	57.79	32.41	32.61
Movement LOS	E	E	F	F	F	F	E	F	F	E	C	C
d_A, Approach Delay [s/veh]	103.65			144.85			129.82			37.10		
Approach LOS	F			F			F			D		
d_I, Intersection Delay [s/veh]	92.92											
Intersection LOS	F											
Intersection V/C	1.036											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.467	2.193	3.184	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	352	335	738	888
d_b, Bicycle Delay [s]	40.76	41.58	23.88	18.54
I_b,int, Bicycle LOS Score for Intersection	2.550	2.140	2.788	2.737
Bicycle LOS	B	B	C	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 16: SR-74 @ Briggs Rd**

Control Type:	Signalized	Delay (sec / veh):	26.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.621

Intersection Setup

Name	Briggs Rd			Briggs Rd			SR-74			SR-74		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔			↔			↔↔↔			↔↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	200.00	100.00	100.00	150.00	100.00	100.00	130.00	100.00	1084.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Briggs Rd			Briggs Rd			SR-74			SR-74		
Base Volume Input [veh/h]	140	59	62	141	48	87	86	1225	183	46	944	70
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	12	0	0	0	0	6	10	29	19	0	18	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	167	65	68	156	53	101	104	1379	220	51	1059	77
Peak Hour Factor	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	43	17	18	40	14	26	27	355	57	13	273	20
Total Analysis Volume [veh/h]	172	67	70	161	55	104	107	1422	227	53	1092	79
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	1	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	4.3	0.0	3.0	4.7	0.0	3.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	14	0	0	21	0	9	21	0	34	46	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	3.3	0.0	2.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	5.30	5.30	4.00	5.70	5.70	4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	3.30	3.30	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	10	10	11	11	7	47	47	4	43	43
g / C, Green / Cycle	0.11	0.11	0.12	0.12	0.08	0.52	0.52	0.04	0.48	0.48
(v / s)_i Volume / Saturation Flow Rate	0.10	0.08	0.09	0.09	0.06	0.40	0.14	0.03	0.32	0.32
s, saturation flow rate [veh/h]	1781	1715	1781	1676	1781	3560	1589	1781	1870	1826
c, Capacity [veh/h]	199	192	212	200	136	1838	821	75	901	880
d1, Uniform Delay [s]	39.38	38.67	38.47	38.66	40.92	17.57	12.31	42.65	17.71	17.72
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	10.61	4.90	5.49	7.05	9.53	3.24	0.84	11.48	3.73	3.84
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.86	0.71	0.76	0.80	0.79	0.77	0.28	0.71	0.66	0.66
d, Delay for Lane Group [s/veh]	49.99	43.57	43.95	45.71	50.45	20.81	13.14	54.12	21.44	21.56
Lane Group LOS	D	D	D	D	D	C	B	D	C	C
Critical Lane Group	Yes	No	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	4.14	3.04	3.59	3.64	2.56	10.64	2.39	1.34	8.87	8.71
50th-Percentile Queue Length [ft/ln]	103.53	76.02	89.87	90.95	64.00	266.03	59.65	33.56	221.79	217.66
95th-Percentile Queue Length [veh/ln]	7.45	5.47	6.47	6.55	4.61	15.99	4.29	2.42	13.76	13.55
95th-Percentile Queue Length [ft/ln]	186.36	136.84	161.77	163.72	115.20	399.78	107.37	60.41	343.91	338.64

Movement, Approach, & Intersection Results

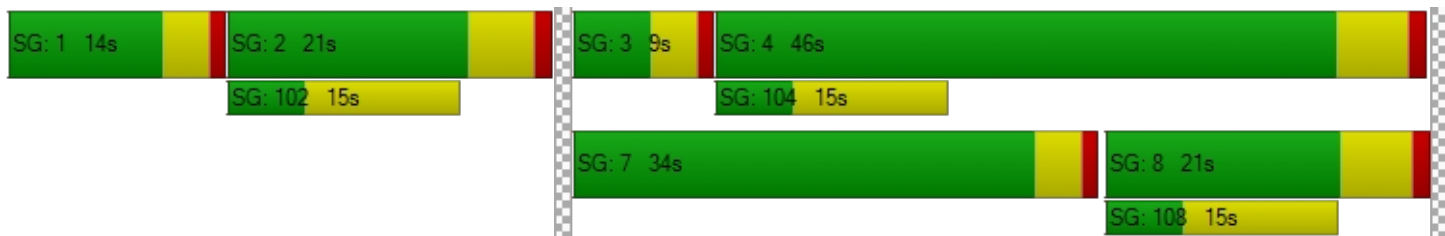
d_M, Delay for Movement [s/veh]	49.99	43.57	43.57	43.95	45.71	45.71	50.45	20.81	13.14	54.12	21.49	21.56
Movement LOS	D	D	D	D	D	D	D	C	B	D	C	C
d_A, Approach Delay [s/veh]	47.14			44.83			21.62			22.91		
Approach LOS	D			D			C			C		
d_I, Intersection Delay [s/veh]	26.30											
Intersection LOS	C											
Intersection V/C	0.621											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.256	2.221	3.300	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	222	349	340	896
d_b, Bicycle Delay [s]	35.56	30.67	31.00	13.72
I_b,int, Bicycle LOS Score for Intersection	2.069	2.088	3.008	2.569
Bicycle LOS	B	B	C	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 17: Matthews Rd @ Palomar Rd

Control Type:	Two-way stop	Delay (sec / veh):	25.9
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.200

Intersection Setup

Name	Palomar Rd		Matthews Rd		Matthews Rd	
Approach	Southbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	0	0
Entry Pocket Length [ft]	100.00	200.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Palomar Rd		Matthews Rd		Matthews Rd	
Base Volume Input [veh/h]	38	158	66	62	219	121
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	53	18	0	86	29
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	42	224	90	67	323	160
Peak Hour Factor	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	57	23	17	82	41
Total Analysis Volume [veh/h]	43	229	92	68	330	163
Pedestrian Volume [ped/h]	0		0		0	

Version 2020 (SP 0-8)

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.20	0.25	0.00	0.00	0.23	0.00
d_M, Delay for Movement [s/veh]	25.87	10.17	0.00	0.00	8.30	0.00
Movement LOS	D	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.73	0.98	0.00	0.00	0.90	0.90
95th-Percentile Queue Length [ft/ln]	18.13	24.42	0.00	0.00	22.57	22.57
d_A, Approach Delay [s/veh]	12.65		0.00		5.56	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	6.68					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 18: McLaughlin Rd @ Murrieta Rd

Control Type:	Two-way stop	Delay (sec / veh):	28.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.074

Intersection Setup

Name	Murrieta Rd			Murrieta Rd			McLaughlin Rd			McLaughlin Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔			↔			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	55.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Murrieta Rd			Murrieta Rd			McLaughlin Rd			McLaughlin Rd		
Base Volume Input [veh/h]	4	287	3	21	366	5	4	0	5	1	2	9
Base Volume Adjustment Factor	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	30	0	0	48	10	6	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	432	4	30	560	17	11	0	7	1	3	13
Peak Hour Factor	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	116	1	8	151	5	3	0	2	0	1	3
Total Analysis Volume [veh/h]	5	465	4	32	602	18	12	0	8	1	3	14
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.03	0.01	0.00	0.07	0.00	0.02	0.01	0.02	0.02
d_M, Delay for Movement [s/veh]	8.77	0.00	0.00	8.39	0.00	0.00	28.84	25.53	13.90	27.08	24.53	11.47
Movement LOS	A	A	A	A	A	A	D	D	B	D	C	B
95th-Percentile Queue Length [veh/ln]	0.02	0.00	0.00	0.09	0.00	0.00	0.29	0.29	0.29	0.14	0.14	0.14
95th-Percentile Queue Length [ft/ln]	0.39	0.00	0.00	2.26	0.00	0.00	7.36	7.36	7.36	3.56	3.56	3.56
d_A, Approach Delay [s/veh]	0.09			0.41			22.87			14.52		
Approach LOS	A			A			C			B		
d_I, Intersection Delay [s/veh]	0.89											
Intersection LOS	D											

Intersection Level Of Service Report
Intersection 19: McLaughlin Rd @ Encanto Dr

Control Type:	Two-way stop	Delay (sec / veh):	12.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.182

Intersection Setup

Name	Encanto Dr		Encanto Dr		McLaughlin Rd	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00		50.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Encanto Dr		Encanto Dr		McLaughlin Rd	
Base Volume Input [veh/h]	113	10	51	98	12	37
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	55	0	0	89	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	125	66	56	108	102	40
Peak Hour Factor	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	33	17	15	28	27	10
Total Analysis Volume [veh/h]	130	69	58	113	106	42
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.04	0.00	0.18	0.05
d_M, Delay for Movement [s/veh]	0.00	0.00	7.74	0.00	12.82	10.74
Movement LOS	A	A	A	A	B	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.13	0.13	0.88	0.88
95th-Percentile Queue Length [ft/ln]	0.00	0.00	3.30	3.30	22.01	22.01
d_A, Approach Delay [s/veh]	0.00		2.62		12.23	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	4.36					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 20: McLaughlin Rd @ Trumble Rd

Control Type:	All-way stop	Delay (sec / veh):	7.5
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.108

Intersection Setup

Name	Trumble Rd			Trumble Rd			McLaughlin Rd			McLaughlin Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Trumble Rd			Trumble Rd			McLaughlin Rd			McLaughlin Rd		
Base Volume Input [veh/h]	32	4	0	0	0	7	8	0	25	0	0	0
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	20	12	43	0	0	70	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	35	4	0	0	0	27	20	43	28	0	70	0
Peak Hour Factor	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	1	0	0	0	7	5	11	7	0	19	0
Total Analysis Volume [veh/h]	37	4	0	0	0	29	21	46	30	0	74	0
Pedestrian Volume [ped/h]	0			0			0			0		

Version 2020 (SP 0-8)

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	799	962	896	861
Degree of Utilization, x	0.05	0.03	0.11	0.09

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.16	0.09	0.36	0.28
95th-Percentile Queue Length [ft]	4.05	2.33	9.07	7.03
Approach Delay [s/veh]	7.75	6.86	7.51	7.57
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	7.49			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 21: McLaughlin Rd @ Sherman Rd

Control Type:	Two-way stop	Delay (sec / veh):	10.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

Name	Sherman Rd			Sherman Rd			McLaughlin Rd			Dawson Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Sherman Rd			Sherman Rd			McLaughlin Rd			Dawson Rd		
Base Volume Input [veh/h]	0	5	0	0	2	0	0	1	0	0	0	0
Base Volume Adjustment Factor	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	70	43	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	7	0	0	3	70	43	1	0	0	0	0
Peak Hour Factor	0.4200	0.4200	0.4200	0.4200	0.4200	0.4200	0.4200	0.4200	0.4200	0.4200	0.4200	0.4200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	4	0	0	2	42	26	1	0	0	0	0
Total Analysis Volume [veh/h]	0	17	0	0	7	167	102	2	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.57	0.00	0.00	7.25	0.00	0.00	9.69	10.16	9.28	9.14	10.11	8.39
Movement LOS	A	A	A	A	A	A	A	B	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.41	0.41	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	10.14	10.14	10.14	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00			0.00			9.70			9.22		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	3.42											
Intersection LOS	B											

**Intersection Level Of Service Report
Intersection 22: Rouse Rd @ Murrieta Rd**

Control Type:	Two-way stop	Delay (sec / veh):	31.9
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.147

Intersection Setup

Name	Murrieta Rd			Murrieta Rd			Rouse Rd			Rouse Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	150.00	100.00	100.00	100.00	100.00	100.00	151.00	100.00	250.00	150.00	100.00	150.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Murrieta Rd			Murrieta Rd			Rouse Rd			Rouse Rd		
Base Volume Input [veh/h]	6	254	18	33	289	13	11	11	3	11	11	48
Base Volume Adjustment Factor	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	12	0	19	19	10	6	0	0	0	0	12
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	8	367	25	66	423	28	22	16	4	16	16	79
Peak Hour Factor	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	98	7	18	113	7	6	4	1	4	4	21
Total Analysis Volume [veh/h]	9	390	27	70	450	30	23	17	4	17	17	84
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.06	0.00	0.00	0.15	0.08	0.01	0.09	0.08	0.13
d_M, Delay for Movement [s/veh]	8.35	0.00	0.00	8.36	0.00	0.00	31.92	22.84	10.95	25.80	22.92	11.27
Movement LOS	A	A	A	A	A	A	D	C	B	D	C	B
95th-Percentile Queue Length [veh/ln]	0.03	0.00	0.00	0.20	0.00	0.00	0.50	0.25	0.02	0.29	0.25	0.44
95th-Percentile Queue Length [ft/ln]	0.63	0.00	0.00	4.89	0.00	0.00	12.54	6.26	0.50	7.27	6.28	10.90
d_A, Approach Delay [s/veh]	0.18			1.06			26.51			15.04		
Approach LOS	A			A			D			C		
d_I, Intersection Delay [s/veh]	3.16											
Intersection LOS	D											

**Intersection Level Of Service Report
Intersection 23: Rouse Rd @ Encanto Dr**

Control Type:	Two-way stop	Delay (sec / veh):	12.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.080

Intersection Setup

Name	Encanto Dr		Encanto Dr		Rouse Rd	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00		50.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Encanto Dr		Encanto Dr		Rouse Rd	
Base Volume Input [veh/h]	85	75	18	119	33	14
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	55	0	0	89	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	148	83	20	220	36	16
Peak Hour Factor	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	42	24	6	63	10	5
Total Analysis Volume [veh/h]	168	94	23	250	41	18
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.02	0.00	0.08	0.02
d_M, Delay for Movement [s/veh]	0.00	0.00	7.81	0.00	12.74	10.07
Movement LOS	A	A	A	A	B	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.05	0.05	0.34	0.34
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.35	1.35	8.47	8.47
d_A, Approach Delay [s/veh]	0.00		0.66		11.92	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	1.49					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 24: McCall Blvd @ Bradley Rd

Control Type:	Signalized	Delay (sec / veh):	64.2
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.066

Intersection Setup

Name	Bradley Rd			Bradley Rd			McCall Blvd			McCall Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	90.00	100.00	100.00	365.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Bradley Rd			Bradley Rd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	68	56	524	92	48	10	19	524	67	463	619	111
Base Volume Adjustment Factor	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	11	0	0	0	0	17	0	18	27	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	95	78	745	128	67	14	27	751	93	666	893	156
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	25	21	196	34	18	4	7	198	24	175	235	41
Total Analysis Volume [veh/h]	100	82	784	135	71	15	28	791	98	701	940	164
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Overlap	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	6	0	5	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	5	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	30	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.2	3.2	0.0	3.0	0.0	3.0	3.6	0.0	3.0	3.6	0.0
All red [s]	0.0	1.0	1.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	36	36	0	13	0	30	33	0	38	41	0
Vehicle Extension [s]	0.0	3.0	3.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	5	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	26	26	0	0	0	0	23	0	0	22	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	2.2	0.0	2.0	0.0	2.0	2.6	0.0	2.0	2.6	0.0
Minimum Recall		No	No		No		No	No		No	No	
Maximum Recall		No	No		No		No	No		No	No	
Pedestrian Recall		No	No		No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.20	4.20	4.00	4.00	4.00	4.00	4.60	4.60	4.00	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20	0.00	2.00	2.00	2.00	2.60	2.60	2.00	2.60	2.60
g_i, Effective Green Time [s]	25	25	70	9	9	3	29	29	40	66	66
g / C, Green / Cycle	0.21	0.21	0.58	0.08	0.08	0.03	0.24	0.24	0.34	0.55	0.55
(v / s)_i Volume / Saturation Flow Rate	0.06	0.04	0.49	0.08	0.05	0.02	0.24	0.24	0.39	0.30	0.31
s, saturation flow rate [veh/h]	1781	1870	1589	1781	1814	1781	1870	1799	1781	1870	1776
c, Capacity [veh/h]	379	398	925	134	136	45	445	428	596	1023	972
d1, Uniform Delay [s]	39.41	38.91	20.69	55.50	53.89	57.91	45.72	45.72	39.94	17.51	17.80
k, delay calibration	0.11	0.11	0.50	0.11	0.11	0.11	0.50	0.50	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.37	0.25	9.50	38.86	4.77	13.17	47.32	48.20	96.28	2.07	2.37
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.26	0.21	0.85	1.01	0.63	0.62	1.02	1.02	1.18	0.54	0.56
d, Delay for Lane Group [s/veh]	39.78	39.16	30.19	94.36	58.66	71.09	93.04	93.92	136.22	19.58	20.17
Lane Group LOS	D	D	C	F	E	E	F	F	F	B	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.51	2.03	19.51	5.48	2.70	1.00	18.88	18.26	32.98	10.06	10.13
50th-Percentile Queue Length [ft/ln]	62.87	50.81	487.86	136.95	67.59	25.01	471.89	456.49	824.45	251.56	253.32
95th-Percentile Queue Length [veh/ln]	4.53	3.66	26.76	9.35	4.87	1.80	26.28	25.54	47.03	15.26	15.35
95th-Percentile Queue Length [ft/ln]	113.17	91.46	668.98	233.74	121.66	45.03	657.09	638.57	1175.67	381.62	383.84

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	39.78	39.16	30.19	94.36	58.66	58.66	71.09	93.42	93.92	136.22	19.82	20.17
Movement LOS	D	D	C	F	E	E	E	F	F	F	B	C
d_A, Approach Delay [s/veh]	31.94			80.47			92.79			65.06		
Approach LOS	C			F			F			E		
d_I, Intersection Delay [s/veh]	64.25											
Intersection LOS	E											
Intersection V/C	1.066											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	0.00
l_p,int, Pedestrian LOS Score for Intersection	2.594	2.116	2.764	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	530	150	473	607
d_b, Bicycle Delay [s]	32.41	51.34	34.96	29.12
l_b,int, Bicycle LOS Score for Intersection	3.154	1.924	2.316	3.049
Bicycle LOS	C	A	B	C

Sequence

Ring 1	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 25: McCall Blvd @ I-215 SB

Control Type:	Signalized	Delay (sec / veh):	36.7
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.919

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	455.00	100.00	100.00	400.00	235.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name				I-215 SB			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	0	0	0	324	1	490	0	895	293	289	858	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0600	1.0600	1.0600	1.0000	1.0600	1.0600	1.0600	1.0600	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	28	0	0	45	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	357	1	541	0	1015	323	319	991	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9600	0.9600	0.9600	1.0000	0.9600	0.9600	0.9600	0.9600	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	93	0	141	0	264	84	83	258	0
Total Analysis Volume [veh/h]	0	0	0	372	1	564	0	1057	336	332	1032	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	5	0	0	5	0	5	5	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	3.2	0.0	0.0	3.6	0.0	3.0	3.6	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	39	0	0	41	0	40	81	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	24	0	0	21	0	0	15	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	2.2	0.0	0.0	2.6	0.0	2.0	2.6	0.0
Minimum Recall					No			No		No	No	
Maximum Recall					No			No		No	No	
Pedestrian Recall					No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		C	R	C	R	L	C
C, Cycle Length [s]		91	91	91	91	91	91
L, Total Lost Time per Cycle [s]		4.20	4.20	4.60	4.60	4.00	4.60
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		2.20	2.20	2.60	2.60	2.00	2.60
g_i, Effective Green Time [s]		30	30	29	29	19	52
g / C, Green / Cycle		0.33	0.33	0.32	0.32	0.21	0.57
(v / s)_i Volume / Saturation Flow Rate		0.21	0.35	0.30	0.21	0.19	0.29
s, saturation flow rate [veh/h]		1781	1589	3560	1589	1781	3560
c, Capacity [veh/h]		584	522	1142	510	376	2049
d1, Uniform Delay [s]		26.10	30.71	30.00	26.75	34.96	11.59
k, delay calibration		0.18	0.50	0.11	0.18	0.13	0.11
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		1.96	63.17	3.81	2.43	8.33	0.19
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.64	1.08	0.93	0.66	0.88	0.50
d, Delay for Lane Group [s/veh]		28.05	93.88	33.81	29.18	43.29	11.79
Lane Group LOS		C	F	C	C	D	B
Critical Lane Group		No	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		6.99	20.13	11.22	6.36	7.77	5.63
50th-Percentile Queue Length [ft/ln]		174.70	503.22	280.40	158.99	194.21	140.64
95th-Percentile Queue Length [veh/ln]		11.32	28.90	16.71	10.50	12.34	9.52
95th-Percentile Queue Length [ft/ln]		283.08	722.52	417.72	262.38	308.48	237.89

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	28.05	28.05	93.88	0.00	33.81	29.18	43.29	11.79	0.00
Movement LOS				C	C	F		C	C	D	B	
d_A, Approach Delay [s/veh]	0.00			67.68			32.69			19.45		
Approach LOS	A			E			C			B		
d_I, Intersection Delay [s/veh]	36.68											
Intersection LOS	D											
Intersection V/C	0.919											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.091	0.000	0.000	0.000
Crosswalk LOS	B	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	580	607	1273
d_b, Bicycle Delay [s]	60.00	30.25	29.12	7.92
I_b,int, Bicycle LOS Score for Intersection	4.132	3.106	2.709	2.685
Bicycle LOS	D	C	B	B

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 26: McCall Blvd @ I-215 NB

Control Type:	Signalized	Delay (sec / veh):	22.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.815

Intersection Setup

Name	I-215 NB						McCall Blvd			McCall Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	240.00	100.00	100.00	100.00	250.00	100.00	100.00	100.00	100.00	320.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name	I-215 NB						McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	397	5	378	0	0	0	301	927	0	0	725	173
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0000	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0000	1.0000	1.0000	1.0600	1.0600	1.0000	1.0000	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	28	0	0	45	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	438	5	417	0	0	0	332	1050	0	0	844	191
Peak Hour Factor	0.9700	0.9700	0.9700	1.0000	1.0000	1.0000	0.9700	0.9700	1.0000	1.0000	0.9700	0.9700
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	113	1	107	0	0	0	86	271	0	0	218	49
Total Analysis Volume [veh/h]	452	5	430	0	0	0	342	1082	0	0	870	197
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	0	0	5	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	0	0	0	5	5	0	0	5	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	3.2	0.0	0.0	0.0	0.0	3.0	3.6	0.0	0.0	3.6	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	22	0	0	0	0	17	38	0	0	21	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	3	0	0	0	0	0	17	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	0.0	0.0	2.0	2.6	0.0	0.0	2.6	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R		L	C	C	R
C, Cycle Length [s]	60	60		60	60	60	60
L, Total Lost Time per Cycle [s]	4.20	4.20		4.00	4.60	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20		2.00	2.60	2.60	2.60
g_i, Effective Green Time [s]	18	18		13	34	16	16
g / C, Green / Cycle	0.30	0.30		0.22	0.56	0.27	0.27
(v / s)_i Volume / Saturation Flow Rate	0.26	0.27		0.19	0.30	0.24	0.12
s, saturation flow rate [veh/h]	1782	1589		1781	3560	3560	1589
c, Capacity [veh/h]	528	471		388	1985	974	435
d1, Uniform Delay [s]	20.07	20.46		22.85	8.48	21.07	18.17
k, delay calibration	0.11	0.11		0.11	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.39	7.55		6.68	1.08	12.30	3.38
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.86	0.91		0.88	0.55	0.89	0.45
d, Delay for Lane Group [s/veh]	24.46	28.01		29.53	9.56	33.36	21.55
Lane Group LOS	C	C		C	A	C	C
Critical Lane Group	No	Yes		Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	6.10	6.22		4.94	3.63	6.86	2.44
50th-Percentile Queue Length [ft/ln]	152.50	155.53		123.50	90.73	171.50	60.96
95th-Percentile Queue Length [veh/ln]	10.15	10.31		8.59	6.53	11.16	4.39
95th-Percentile Queue Length [ft/ln]	253.76	257.79		214.63	163.31	278.89	109.73

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	24.46	24.46	28.01	0.00	0.00	0.00	29.53	9.56	0.00	0.00	33.36	21.55
Movement LOS	C	C	C				C	A			C	C
d_A, Approach Delay [s/veh]	26.18			0.00			14.36			31.18		
Approach LOS	C			A			B			C		
d_I, Intersection Delay [s/veh]	22.78											
Intersection LOS	C											
Intersection V/C	0.815											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.128	0.000	0.000	0.000
Crosswalk LOS	B	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	593	0	1113	547
d_b, Bicycle Delay [s]	14.84	30.00	5.90	15.84
I_b,int, Bicycle LOS Score for Intersection	3.023	4.132	2.734	2.440
Bicycle LOS	C	D	B	B

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 27: McCall Blvd @ Encanto Dr

Control Type:	Signalized	Delay (sec / veh):	21.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.688

Intersection Setup

Name	Encanto Dr			Encanto Dr			McCall Blvd			McCall Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	130.00	100.00	130.00	80.00	100.00	100.00	100.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Encanto Dr			Encanto Dr			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	173	25	3	33	25	115	164	903	238	36	610	35
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	11	0	27	18	45	28	0	0	0	0	17
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	191	39	3	63	46	172	209	995	263	39	672	55
Peak Hour Factor	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	49	10	1	16	12	44	53	254	67	10	171	14
Total Analysis Volume [veh/h]	195	40	3	64	47	176	213	1015	268	40	686	56
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.2	0.0	0.0	3.2	0.0	3.0	3.6	0.0	3.0	3.6	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	31	0	0	31	0	9	20	0	9	20	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	17	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	2.2	0.0	2.0	2.6	0.0	2.0	2.6	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	L	C	C	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.20	4.20	4.20	4.20	4.20	4.00	4.60	4.60	4.00	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20	2.20	2.20	2.20	2.00	2.60	2.60	2.00	2.60	2.60
g_i, Effective Green Time [s]	20	20	20	20	20	9	25	25	2	18	18
g / C, Green / Cycle	0.34	0.34	0.34	0.34	0.34	0.15	0.41	0.41	0.04	0.30	0.30
(v / s)_i Volume / Saturation Flow Rate	0.17	0.02	0.00	0.05	0.14	0.12	0.35	0.36	0.02	0.20	0.20
s, saturation flow rate [veh/h]	1158	1870	1589	1367	1641	1781	1870	1738	1781	1870	1821
c, Capacity [veh/h]	351	627	533	516	550	272	767	713	73	558	544
d1, Uniform Delay [s]	23.13	13.53	13.27	15.87	15.33	24.45	16.09	16.28	28.21	18.46	18.47
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.22	0.23	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.38	0.04	0.00	0.11	0.48	4.93	5.82	7.37	6.30	1.42	1.46
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.56	0.06	0.01	0.12	0.41	0.78	0.86	0.88	0.55	0.67	0.67
d, Delay for Lane Group [s/veh]	24.51	13.57	13.27	15.97	15.81	29.38	21.91	23.65	34.52	19.89	19.93
Lane Group LOS	C	B	B	B	B	C	C	C	C	B	B
Critical Lane Group	Yes	No	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.58	0.34	0.03	0.61	2.18	3.03	8.04	7.99	0.65	4.24	4.14
50th-Percentile Queue Length [ft/ln]	64.51	8.52	0.63	15.35	54.48	75.66	201.00	199.68	16.31	105.99	103.49
95th-Percentile Queue Length [veh/ln]	4.64	0.61	0.05	1.11	3.92	5.45	12.69	12.62	1.17	7.62	7.45
95th-Percentile Queue Length [ft/ln]	116.12	15.34	1.13	27.64	98.07	136.19	317.26	315.55	29.36	190.41	186.28

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	24.51	13.57	13.27	15.97	15.81	15.81	29.38	22.52	23.65	34.52	19.91	19.93
Movement LOS	C	B	B	B	B	B	C	C	C	C	B	B
d_A, Approach Delay [s/veh]	22.53			15.84			23.70			20.66		
Approach LOS	C			B			C			C		
d_I, Intersection Delay [s/veh]	21.95											
Intersection LOS	C											
Intersection V/C	0.688											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	21.68	0.00	21.68
I_p,int, Pedestrian LOS Score for Intersection	2.256	2.115	0.000	2.796
Crosswalk LOS	B	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	893	893	513	513
d_b, Bicycle Delay [s]	9.19	9.19	16.58	16.58
I_b,int, Bicycle LOS Score for Intersection	1.952	2.033	2.794	2.205
Bicycle LOS	A	B	C	B

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 28: Sherman Rd @ Project dwy 1

Control Type:	Two-way stop	Delay (sec / veh):	26.3
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.111

Intersection Setup

Name	Sherman Rd		Sherman Rd		Westbound	
Approach	Northbound		Southbound			
Lane Configuration	↩		↩↪		↪	
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Sherman Rd		Sherman Rd		Westbound	
Base Volume Input [veh/h]	32	0	0	17	0	0
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	349	21	196	224	33	313
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	385	21	196	243	33	313
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	101	6	52	64	9	82
Total Analysis Volume [veh/h]	405	22	206	256	35	329
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			Yes
Number of Storage Spaces in Median	0	0	1

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.18	0.00	0.11	0.52
d_M, Delay for Movement [s/veh]	0.00	0.00	8.88	0.00	26.26	20.53
Movement LOS	A	A	A	A	D	C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.66	0.00	4.35	4.35
95th-Percentile Queue Length [ft/ln]	0.00	0.00	16.58	0.00	108.80	108.80
d_A, Approach Delay [s/veh]	0.00		3.96		21.08	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	7.58					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 29: Sherman Rd @ Project dwy 2

Control Type:	Two-way stop	Delay (sec / veh):	14.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.074

Intersection Setup

Name	Sherman Rd		Sherman Rd		Eastbound	
Approach	Northbound		Southbound			
Lane Configuration	↶		↷		↷	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Sherman Rd		Sherman Rd		Eastbound	
Base Volume Input [veh/h]	0	32	17	0	0	0
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	340	235	22	29	2
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	376	254	22	29	2
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	99	67	6	8	1
Total Analysis Volume [veh/h]	1	396	267	23	31	2
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.07	0.00
d_M, Delay for Movement [s/veh]	7.83	0.00	0.00	0.00	14.31	10.43
Movement LOS	A	A	A	A	B	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.25	0.25
95th-Percentile Queue Length [ft/ln]	0.06	0.06	0.00	0.00	6.21	6.21
d_A, Approach Delay [s/veh]	0.02		0.00		14.07	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	0.66					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 30: Sherman Rd @ Project dwy 3

Control Type:	Two-way stop	Delay (sec / veh):	22.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.043

Intersection Setup

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

Volumes

Name	Sherman Rd			Sherman Rd								
Base Volume Input [veh/h]	0	32	0	0	17	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	22	21	196	35	5	9	0	1	33	0	311
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	58	21	196	54	5	9	0	1	33	0	311
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	15	6	52	14	1	2	0	0	9	0	82
Total Analysis Volume [veh/h]	1	61	22	206	57	5	9	0	1	35	0	327
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.14	0.00	0.00	0.04	0.00	0.00	0.09	0.00	0.33
d_M, Delay for Movement [s/veh]	7.34	0.00	0.00	7.75	0.00	0.00	22.93	15.23	9.31	16.92	17.34	11.58
Movement LOS	A	A	A	A	A	A	C	C	A	C	C	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.47	0.00	0.00	0.14	0.14	0.14	2.08	2.08	2.08
95th-Percentile Queue Length [ft/ln]	0.05	0.05	0.05	11.78	0.00	0.00	3.43	3.43	3.43	52.04	52.04	52.04
d_A, Approach Delay [s/veh]	0.09			5.96			21.57			12.09		
Approach LOS	A			A			C			B		
d_I, Intersection Delay [s/veh]	8.56											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 31: Trumble Rd @ Project dwy 4

Control Type:	Two-way stop	Delay (sec / veh):	8.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.011

Intersection Setup

Name	Trumble Rd		Trumble Rd		Project dwy	
Approach	Northbound		Southbound		Westbound	
Lane Configuration	↬		↵		↶	
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Trumble Rd		Trumble Rd		Project dwy	
Base Volume Input [veh/h]	12	0	0	7	0	0
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	6	0	0	10	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	13	6	0	7	10	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	2	0	2	3	0
Total Analysis Volume [veh/h]	14	6	0	7	11	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.26	0.00	8.67	8.43
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.03	0.03
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.84	0.84
d_A, Approach Delay [s/veh]	0.00		0.00		8.67	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.51					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 32: Trumble Rd @ Project dwy 5

Control Type:	Two-way stop	Delay (sec / veh):	8.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.011

Intersection Setup

Name	Trumble Rd		Trumble Rd		Project dwy	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Trumble Rd		Trumble Rd		Project dwy	
Base Volume Input [veh/h]	12	0	0	7	0	0
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	6	6	0	10	10	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	19	6	0	17	10	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	2	0	4	3	0
Total Analysis Volume [veh/h]	20	6	0	18	11	0
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.27	0.00	8.75	8.46
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.03	0.03
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.86	0.86
d_A, Approach Delay [s/veh]	0.00		0.00		8.75	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.75					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 33: Dawson Rd @ Project dwy 6

Control Type:	Two-way stop	Delay (sec / veh):	11.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.201

Intersection Setup

Name	Dawson Rd		Dawson Rd		Eastbound	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration	↶		↷		↷	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Dawson Rd		Dawson Rd		Eastbound	
Base Volume Input [veh/h]	0	1	5	0	0	0
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	105	70	88	143	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	106	75	88	143	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	28	20	23	38	0
Total Analysis Volume [veh/h]	0	112	79	93	151	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.20	0.00
d_M, Delay for Movement [s/veh]	7.56	0.00	0.00	0.00	11.00	10.10
Movement LOS	A	A	A	A	B	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.75	0.75
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	18.70	18.70
d_A, Approach Delay [s/veh]	0.00		0.00		11.00	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	3.82					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 34: Dawson Rd @ Project dwy 7

Control Type:	Two-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.115

Intersection Setup

Name	Dawson Rd		Dawson Rd		Eastbound	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration	↶		↷		↷	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Dawson Rd		Dawson Rd		Eastbound	
Base Volume Input [veh/h]	0	1	5	0	0	0
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	70	105	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1	5	70	105	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	1	18	28	0
Total Analysis Volume [veh/h]	0	1	5	74	111	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.11	0.00
d_M, Delay for Movement [s/veh]	7.37	0.00	0.00	0.00	9.20	8.98
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.39	0.39
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	9.68	9.68
d_A, Approach Delay [s/veh]	0.00		0.00		9.20	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	5.35					
Intersection LOS	A					

Appendix D-3

Opening Day with Improvements

Option 1: Copy of Case Rd/Bonnie Dr @ I-215 SB

Number	1					
Intersection	Case Rd/Bonnie Dr @ I-215 SB					
Control Type	Signalized					
Analysis Method	HCM 6th Edition					
Name	Case Rd		I-215 SB		Bonnie Dr	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Base Volume Input [veh/h]	708	415	656	20	37	178
Total Analysis Volume [veh/h]	810	472	745	23	41	231

Intersection Settings

Cycle Length [s]	105					
Coordination Type	Time of Day Pattern Coordinated					
Actuation Type	Fully actuated					
Lost time [s]	6.00					
Control Type	Protected	Permissive	Permissive	Overlap	Split	Overlap
Signal Group	1	6	2	2	3	3
Auxiliary Signal Groups				1,2,3,6		1,2,3,6
Lead / Lag	Lag	-	-	-	Lead	-
Minimum Green [s]	5	5	5	5	5	5
Maximum Green [s]	30	30	30	30	30	30
Amber [s]	3.0	4.3	4.3	4.3	4.3	4.3
All red [s]	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	63	81	18	18	24	24
Walk [s]	0	5	5	5	5	5
Pedestrian Clearance [s]	0	17	7	7	10	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0
Minimum Recall	No	No	No	No	No	No
Maximum Recall	No	No	No	No	No	No
Pedestrian Recall	No	No	No	No	No	No
Pedestrian Signal Group	0					
Pedestrian Walk [s]	0					
Pedestrian Clearance [s]	0					

Lane Group Calculations

g / C, Green / Cycle	0.56	0.85	0.25	1.16	0.05	1.16
(v / s)_i Volume / Saturation Flow Rate	0.57	0.25	0.21	0.01	0.02	0.15
so, Base Saturation Flow per Lane [pc/h/ln]	1900	1900	1900	1900	1900	1900
Arrival type	3		3		3	
s, saturation flow rate [veh/h]	1417	1870	3560	1589	1781	1589
c, Capacity [veh/h]	833	1592	898	1850	85	1850
X, volume / capacity	0.97	0.30	0.83	0.01	0.48	0.12
d, Delay for Lane Group [s/veh]	50.69	2.03	45.86	0.01	52.92	0.14
Lane Group LOS	D	A	D	A	D	A
Critical Lane Group	Yes	No	Yes	No	Yes	No

50th-Percentile Queue Length [veh/ln]	24.40	0.70	9.69	0.01	1.11	0.07
50th-Percentile Queue Length [ft/ln]	610.12	17.41	242.26	0.16	27.87	1.78
95th-Percentile Queue Length [veh/ln]	32.51	1.25	14.80	0.01	2.01	0.13
95th-Percentile Queue Length [ft/ln]	812.66	31.33	369.89	0.28	50.17	3.21

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	50.69	2.03	45.86	0.01	52.92	0.14
Movement LOS	D	A	D	A	D	A
Critical Movement	No	No	No	No	Yes	No
d_A, Approach Delay [s/veh]	32.78		44.49		8.09	
Approach LOS	C		D		A	
d_I, Intersection Delay [s/veh]	33.76					
Intersection LOS	C					
Intersection V/C	0.853					

Option 1: Copy of Ethanac Rd @ I-215 NB

Number	8											
Intersection	Ethanac Rd @ I-215 NB											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	I-215 NB						Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Base Volume Input [veh/h]	288	3	109	0	0	0	204	487	0	0	456	152
Total Analysis Volume [veh/h]	344	3	397	0	0	0	244	1055	0	0	640	287

Intersection Settings

Cycle Length [s]	60											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Fully actuated											
Lost time [s]	8.00											
Control Type	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	0	0	0	5	5	0	0	5	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	3.2	0.0	0.0	0.0	0.0	3.0	4.7	0.0	0.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	20	0	0	0	0	13	40	0	0	27	0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	7	0	0	0	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Pedestrian Signal Group	0											
Pedestrian Walk [s]	0											
Pedestrian Clearance [s]	0											

Lane Group Calculations

g / C, Green / Cycle	0.26	0.26		0.17	0.57	0.33	0.33	
(v / s)_i Volume / Saturation Flow Rate	0.19	0.25		0.14	0.30	0.25	0.27	
so, Base Saturation Flow per Lane [pc/h/ln]	1900	1900		1900	1900	1900	1900	
Arrival type	3		3		3		3	
s, saturation flow rate [veh/h]	1782	1589		1781	3560	1870	1686	
c, Capacity [veh/h]	469	419		307	2036	623	562	
X, volume / capacity	0.74	0.95		0.79	0.52	0.74	0.83	
d, Delay for Lane Group [s/veh]	22.57	33.12		28.56	8.78	25.65	31.45	
Lane Group LOS	C	C		C	A	C	C	
Critical Lane Group	No	Yes		Yes	No	No	Yes	

50th-Percentile Queue Length [veh/ln]	4.36	6.30		3.24	2.78	5.87	6.71
50th-Percentile Queue Length [ft/ln]	108.88	157.56		80.91	69.54	146.86	167.75
95th-Percentile Queue Length [veh/ln]	7.78	10.42		5.83	5.01	9.85	10.96
95th-Percentile Queue Length [ft/ln]	194.44	260.48		145.64	125.17	246.24	273.96

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	22.57	22.57	33.12	0.00	0.00	0.00	28.56	8.78	0.00	0.00	27.25	31.45
Movement LOS	C	C	C				C	A			C	C
Critical Movement	No	No	Yes				No	No			No	No
d_A, Approach Delay [s/veh]	28.20			0.00			12.49			28.55		
Approach LOS	C			A			B			C		
d_I, Intersection Delay [s/veh]	21.44											
Intersection LOS	C											
Intersection V/C	0.763											

Option 1: Copy of Ethanac Rd @ I-215 NB

Number	8											
Intersection	Ethanac Rd @ I-215 NB											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	I-215 NB						Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Base Volume Input [veh/h]	388	2	187	0	0	0	228	417	0	0	357	147
Total Analysis Volume [veh/h]	464	2	400	0	0	0	273	811	0	0	803	562

Intersection Settings

Cycle Length [s]	115											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Fully actuated											
Lost time [s]	8.00											
Control Type	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	0	0	0	5	5	0	0	5	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	3.2	0.0	0.0	0.0	0.0	3.0	4.7	0.0	0.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	39	0	0	0	0	9	76	0	0	67	0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	7	0	0	0	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Pedestrian Signal Group	0											
Pedestrian Walk [s]	0											
Pedestrian Clearance [s]	0											

Lane Group Calculations

g / C, Green / Cycle	0.28	0.28		0.17	0.63	0.43	0.43	
(v / s)_i Volume / Saturation Flow Rate	0.26	0.25		0.15	0.23	0.36	0.42	
so, Base Saturation Flow per Lane [pc/h/ln]	1900	1900		1900	1900	1900	1900	
Arrival type	3		3		3		3	
s, saturation flow rate [veh/h]	1781	1589		1781	3560	1870	1633	
c, Capacity [veh/h]	500	446		307	2254	797	696	
X, volume / capacity	0.93	0.90		0.89	0.36	0.86	0.98	
d, Delay for Lane Group [s/veh]	60.97	56.56		55.29	10.47	41.26	62.30	
Lane Group LOS	E	E		E	B	D	E	
Critical Lane Group	Yes	No		Yes	No	No	Yes	

50th-Percentile Queue Length [veh/ln]	15.55	12.82		8.05	4.30	18.16	22.81
50th-Percentile Queue Length [ft/ln]	388.76	320.54		201.18	107.60	454.09	570.20
95th-Percentile Queue Length [veh/ln]	22.02	18.69		12.70	7.71	25.15	30.64
95th-Percentile Queue Length [ft/ln]	550.44	467.35		317.48	192.66	628.83	766.00

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	60.97	60.97	56.56	0.00	0.00	0.00	55.29	10.47	0.00	0.00	44.41	62.30
Movement LOS	E	E	E				E	B			D	E
Critical Movement	No	No	No				No	No			No	Yes
d_A, Approach Delay [s/veh]	58.93			0.00			21.76		51.78			
Approach LOS	E			A			C		D			
d_I, Intersection Delay [s/veh]	43.83											
Intersection LOS	D											
Intersection V/C	0.895											

Option 1: Copy of Ethanac Rd @ Encanto Dr

Number	9					
Intersection	Ethanac Rd @ Encanto Dr					
Control Type	Signalized					
Analysis Method	HCM 6th Edition					
Name	Encanto Dr		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Base Volume Input [veh/h]	92	75	485	115	41	519
Total Analysis Volume [veh/h]	112	91	1333	139	49	829

Intersection Settings

Cycle Length [s]	70					
Coordination Type	Time of Day Pattern Coordinated					
Actuation Type	Fixed time					
Lost time [s]	0.00					
Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	4	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	5	0	5	5
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	19	0	39	0	12	51
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	10	0	10	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Pedestrian Signal Group	0					
Pedestrian Walk [s]	0					
Pedestrian Clearance [s]	0					

Lane Group Calculations

g / C, Green / Cycle	0.21	0.50	0.50	0.11	0.67
(v / s)_i Volume / Saturation Flow Rate	0.13	0.44	0.45	0.03	0.26
so, Base Saturation Flow per Lane [pc/h/ln]	1900	1900	1900	1900	1900
Arrival type	3	3	3	3	3
s, saturation flow rate [veh/h]	1521	1683	1629	1603	3204
c, Capacity [veh/h]	326	841	814	183	2152
X, volume / capacity	0.62	0.87	0.90	0.27	0.39
d, Delay for Lane Group [s/veh]	33.62	27.81	31.30	31.87	5.62
Lane Group LOS	C	C	C	C	A
Critical Lane Group	Yes	No	Yes	Yes	No

50th-Percentile Queue Length [veh/ln]	3.69	11.81	12.65	0.86	1.61
50th-Percentile Queue Length [ft/ln]	92.23	295.25	316.27	21.49	40.20
95th-Percentile Queue Length [veh/ln]	6.64	17.45	18.48	1.55	2.89
95th-Percentile Queue Length [ft/ln]	166.02	436.15	462.09	38.67	72.36

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	33.62	33.62	29.37	31.30	31.87	5.62
Movement LOS	C	C	C	C	C	A
Critical Movement	Yes	No	No	No	No	No
d_A, Approach Delay [s/veh]	33.62		29.55		7.09	
Approach LOS	C		C		A	
d_I, Intersection Delay [s/veh]	22.15					
Intersection LOS	C					
Intersection V/C	0.616					

Option 1: Copy of Ethanac Rd @ Encanto Dr

Number	9					
Intersection	Ethanac Rd @ Encanto Dr					
Control Type	Signalized					
Analysis Method	HCM 6th Edition					
Name	Encanto Dr		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Base Volume Input [veh/h]	115	78	468	126	50	380
Total Analysis Volume [veh/h]	136	93	1037	149	59	1205

Intersection Settings

Cycle Length [s]	65					
Coordination Type	Time of Day Pattern Coordinated					
Actuation Type	Fully actuated					
Lost time [s]	0.00					
Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	4	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	5	0	5	5
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	19	0	29	0	17	46
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	10	0	10	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Pedestrian Signal Group	0					
Pedestrian Walk [s]	0					
Pedestrian Clearance [s]	0					

Lane Group Calculations

g / C, Green / Cycle	0.19	0.45	0.45	0.06	0.61
(v / s)_i Volume / Saturation Flow Rate	0.15	0.35	0.37	0.04	0.38
so, Base Saturation Flow per Lane [pc/h/ln]	1900	1900	1900	1900	1900
Arrival type	3	3		3	
s, saturation flow rate [veh/h]	1528	1683	1612	1603	3204
c, Capacity [veh/h]	293	755	723	97	1951
X, volume / capacity	0.78	0.79	0.82	0.61	0.62
d, Delay for Lane Group [s/veh]	19.98	11.26	12.03	24.34	5.23
Lane Group LOS	B	B	B	C	A
Critical Lane Group	Yes	No	Yes	Yes	No

50th-Percentile Queue Length [veh/ln]	2.01	3.36	3.52	0.57	0.62
50th-Percentile Queue Length [ft/ln]	50.34	83.92	88.04	14.20	15.47
95th-Percentile Queue Length [veh/ln]	3.62	6.04	6.34	1.02	1.11
95th-Percentile Queue Length [ft/ln]	90.62	151.06	158.47	25.56	27.84

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	19.98	19.98	11.59	12.03	24.34	5.23
Movement LOS	B	B	B	B	C	A
Critical Movement	No	No	No	No	Yes	No
d_A, Approach Delay [s/veh]	19.98		11.65		6.13	
Approach LOS	B		B		A	
d_I, Intersection Delay [s/veh]	9.75					
Intersection LOS	A					
Intersection V/C	0.555					

Option 1: Copy of Ethanac Rd @ Sherman Rd

Number	11											
Intersection	Ethanac Rd @ Sherman Rd											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	Sherman Rd			Sherman Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Base Volume Input [veh/h]	6	3	2	4	3	102	97	340	13	8	354	3
Total Analysis Volume [veh/h]	162	17	22	27	64	128	122	644	583	99	503	9

Intersection Settings

Cycle Length [s]	70											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Fully actuated											
Lost time [s]	0.00											
Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	7	4	0	3	8	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	0	5	5	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.2	0.0	3.0	3.2	0.0	3.0	4.7	0.0	3.0	4.7	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	11	22	0	12	23	0	10	27	0	9	26	0
Walk [s]	0	5	0	0	5	0	0	5	0	5	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	10	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Pedestrian Signal Group	0											
Pedestrian Walk [s]	0											
Pedestrian Clearance [s]	0											

Lane Group Calculations

g / C, Green / Cycle	0.08	0.17	0.03	0.12	0.12	0.10	0.44	0.44	0.08	0.42	
(v / s)_i Volume / Saturation Flow Rate	0.05	0.03	0.02	0.04	0.09	0.08	0.38	0.41	0.06	0.31	
so, Base Saturation Flow per Lane [pc/h/ln]	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Arrival type	3			3			3			3	
s, saturation flow rate [veh/h]	3113	1531	1603	1683	1431	1603	1683	1431	1603	1678	
c, Capacity [veh/h]	260	267	48	204	173	156	739	628	127	706	
X, volume / capacity	0.62	0.15	0.56	0.31	0.74	0.78	0.87	0.93	0.78	0.73	
d, Delay for Lane Group [s/veh]	31.05	22.83	40.77	26.81	33.47	36.65	24.82	33.29	39.11	17.89	
Lane Group LOS	C	C	D	C	C	D	C	C	D	B	
Critical Lane Group	Yes	No	No	No	Yes	No	No	Yes	Yes	No	

50th-Percentile Queue Length [veh/ln]	1.24	0.49	0.53	0.90	2.10	1.99	8.24	8.97	1.69	5.30
50th-Percentile Queue Length [ft/ln]	31.09	12.36	13.24	22.61	52.47	49.70	205.91	224.16	42.23	132.45
95th-Percentile Queue Length [veh/ln]	2.24	0.89	0.95	1.63	3.78	3.58	12.94	13.88	3.04	9.07
95th-Percentile Queue Length [ft/ln]	55.96	22.26	23.82	40.71	94.45	89.47	323.58	346.93	76.01	226.82

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	31.05	22.83	22.83	40.77	26.81	33.47	36.65	24.82	33.29	39.11	17.89	17.89
Movement LOS	C	C	C	D	C	C	D	C	C	D	B	B
Critical Movement	No	No	No	Yes	No	No	No	No	No	No	No	No
d_A, Approach Delay [s/veh]	29.46			32.43			29.55			21.33		
Approach LOS	C			C			C			C		
d_I, Intersection Delay [s/veh]	27.70											
Intersection LOS	C											
Intersection V/C	0.611											

Option 1: Copy of Ethanac Rd @ Sherman Rd

Number	11											
Intersection	Ethanac Rd @ Sherman Rd											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	Sherman Rd			Sherman Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Base Volume Input [veh/h]	19	8	5	3	5	90	139	349	3	9	230	1
Total Analysis Volume [veh/h]	578	68	94	17	41	107	166	550	359	67	483	23

Intersection Settings

Cycle Length [s]	70											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Fully actuated											
Lost time [s]	0.00											
Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	7	4	0	3	8	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	0	5	5	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.2	0.0	3.0	3.2	0.0	3.0	4.7	0.0	3.0	4.7	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	11	31	0	9	29	0	9	21	0	9	21	0
Walk [s]	0	5	0	0	5	0	0	5	0	5	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	10	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Pedestrian Signal Group	0											
Pedestrian Walk [s]	0											
Pedestrian Clearance [s]	0											

Lane Group Calculations

g / C, Green / Cycle	0.22	0.30	0.02	0.10	0.10	0.13	0.40	0.40	0.05	0.33	
(v / s)_i Volume / Saturation Flow Rate	0.19	0.11	0.01	0.02	0.07	0.10	0.33	0.25	0.04	0.30	
so, Base Saturation Flow per Lane [pc/h/ln]	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Arrival type	3			3			3			3	
s, saturation flow rate [veh/h]	3113	1527	1603	1683	1431	1603	1683	1431	1603	1670	
c, Capacity [veh/h]	693	461	32	166	141	204	676	574	85	546	
X, volume / capacity	0.83	0.35	0.54	0.25	0.76	0.81	0.81	0.63	0.79	0.93	
d, Delay for Lane Group [s/veh]	32.31	22.23	52.03	34.00	43.08	41.54	28.18	20.97	52.44	41.69	
Lane Group LOS	C	C	D	C	D	D	C	C	D	D	
Critical Lane Group	Yes	No	No	No	Yes	Yes	No	No	No	Yes	

50th-Percentile Queue Length [veh/ln]	5.34	2.34	0.44	0.75	2.29	3.31	9.03	4.83	1.55	10.45
50th-Percentile Queue Length [ft/ln]	133.53	58.42	11.01	18.81	57.21	82.66	225.70	120.78	38.87	261.22
95th-Percentile Queue Length [veh/ln]	9.13	4.21	0.79	1.35	4.12	5.95	13.96	8.44	2.80	15.75
95th-Percentile Queue Length [ft/ln]	228.29	105.16	19.81	33.85	102.97	148.79	348.90	210.90	69.96	393.76

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	32.31	22.23	22.23	52.03	34.00	43.08	41.54	28.18	20.97	52.44	41.69	41.69
Movement LOS	C	C	C	D	C	D	D	C	C	D	D	D
Critical Movement	No	No	No	No	No	No	No	No	No	Yes	No	No
d_A, Approach Delay [s/veh]	30.11			41.75			27.84			42.94		
Approach LOS	C			D			C			D		
d_I, Intersection Delay [s/veh]	32.78											
Intersection LOS	C											
Intersection V/C	0.667											

Version 2020 (SP 0-0)

Unmitigated

Number	12					
Intersection	Ethanac Rd @ Dawson Rd					
Control Type	Signalized					
Analysis Method	HCM 6th Edition					
Name	Dawson Rd		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Base Volume Input [veh/h]	0	2	377	1	3	332
Total Analysis Volume [veh/h]	58	9	465	223	36	477

Intersection Settings

Cycle Length [s]	65					
Coordination Type	Time of Day Pattern Coordinated					
Actuation Type	Fully actuated					
Lost time [s]	0.00					
Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	8	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lag	-	-	-	Lead	-
Minimum Green [s]	5	0	5	0	5	5
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.2	0.0	3.2	0.0	3.0	4.7
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	10	0	46	0	9	55
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	10	0	10	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Pedestrian Signal Group	0					
Pedestrian Walk [s]	0					
Pedestrian Clearance [s]	0					

Lane Group Calculations

g / C, Green / Cycle	0.07	0.50	0.04	0.62
(v / s)_i Volume / Saturation Flow Rate	0.04	0.43	0.02	0.28
so, Base Saturation Flow per Lane [pc/h/ln]	1900	1900	1900	1900
Arrival type	3	3	3	
s, saturation flow rate [veh/h]	1577	1592	1603	1683
c, Capacity [veh/h]	112	797	70	1046
X, volume / capacity	0.60	0.86	0.52	0.46
d, Delay for Lane Group [s/veh]	19.51	10.03	20.83	3.53
Lane Group LOS	B	B	C	A
Critical Lane Group	Yes	Yes	Yes	No

50th-Percentile Queue Length [veh/ln]	0.53	1.46	0.29	0.09
50th-Percentile Queue Length [ft/ln]	13.34	36.61	7.16	2.26
95th-Percentile Queue Length [veh/ln]	0.96	2.64	0.52	0.16
95th-Percentile Queue Length [ft/ln]	24.02	65.91	12.88	4.07

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	19.51	19.51	10.03	10.03	20.83	3.53
Movement LOS	B	B	B	B	C	A
Critical Movement	No	No	No	No	Yes	No
d_A, Approach Delay [s/veh]	19.51		10.03		4.74	
Approach LOS	B		B		A	
d_I, Intersection Delay [s/veh]	8.40					
Intersection LOS	A					
Intersection V/C	0.497					

Option 1: Copy of Ethanac Rd @ Dawson Rd

Number	12					
Intersection	Ethanac Rd @ Dawson Rd					
Control Type	Signalized					
Analysis Method	HCM 6th Edition					
Name	Dawson Rd		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Base Volume Input [veh/h]	0	1	351	2	3	240
Total Analysis Volume [veh/h]	245	38	542	159	26	365

Intersection Settings

Cycle Length [s]	110					
Coordination Type	Time of Day Pattern Coordinated					
Actuation Type	Fully actuated					
Lost time [s]	0.00					
Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	8	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lag	-	-	-	Lead	-
Minimum Green [s]	5	0	5	0	5	5
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.2	0.0	3.2	0.0	3.0	4.7
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	20	0	74	0	16	90
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	10	0	10	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Pedestrian Signal Group	0					
Pedestrian Walk [s]	0					
Pedestrian Clearance [s]	0					

Lane Group Calculations

g / C, Green / Cycle	0.22	0.48	0.03	0.56
(v / s)_i Volume / Saturation Flow Rate	0.18	0.43	0.02	0.22
so, Base Saturation Flow per Lane [pc/h/ln]	1900	1900	1900	1900
Arrival type	3	3	3	
s, saturation flow rate [veh/h]	1577	1618	1603	1683
c, Capacity [veh/h]	352	773	50	947
X, volume / capacity	0.80	0.91	0.52	0.39
d, Delay for Lane Group [s/veh]	21.35	18.90	30.31	5.90
Lane Group LOS	C	B	C	A
Critical Lane Group	Yes	Yes	Yes	No

50th-Percentile Queue Length [veh/ln]	2.86	5.26	0.34	0.91
50th-Percentile Queue Length [ft/ln]	71.57	131.42	8.54	22.77
95th-Percentile Queue Length [veh/ln]	5.15	9.02	0.61	1.64
95th-Percentile Queue Length [ft/ln]	128.83	225.42	15.37	40.99

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	21.35	21.35	18.90	18.90	30.31	5.90
Movement LOS	C	C	B	B	C	A
Critical Movement	No	No	No	No	Yes	No
d_A, Approach Delay [s/veh]	21.35		18.90		7.52	
Approach LOS	C		B		A	
d_I, Intersection Delay [s/veh]	16.17					
Intersection LOS	B					
Intersection V/C	0.629					

Option 1: Copy of SR-74 @ Menifee Rd

Number	15											
Intersection	SR-74 @ Menifee Rd											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	Menifee Rd			Menifee Rd			SR-74			SR-74		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Base Volume Input [veh/h]	123	212	359	114	210	25	98	897	189	251	1050	142
Total Analysis Volume [veh/h]	145	248	420	134	246	50	119	1065	222	295	1291	167

Intersection Settings

Cycle Length [s]	100											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Fully actuated											
Lost time [s]	12.00											
Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lag	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	5	5	5	0	5	5	0	5	5	0
Maximum Green [s]	30	30	30	30	30	0	30	30	0	30	30	0
Amber [s]	3.9	3.0	3.0	3.0	3.9	0.0	3.0	4.7	0.0	3.0	4.7	0.0
All red [s]	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	14	22	22	14	22	0	11	43	0	21	53	0
Walk [s]	5	5	5	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	10	10	10	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No	No	No	No		No	No		No	No	
Maximum Recall	No	No	No	No	No		No	No		No	No	
Pedestrian Recall	No	No	No	No	No		No	No		No	No	
Pedestrian Signal Group	0											
Pedestrian Walk [s]	0											
Pedestrian Clearance [s]	0											

Lane Group Calculations

g / C, Green / Cycle	0.09	0.19	0.40	0.09	0.17	0.07	0.37	0.37	0.17	0.47	0.47	
(v / s)_i Volume / Saturation Flow Rate	0.08	0.13	0.26	0.08	0.16	0.07	0.35	0.36	0.17	0.39	0.40	
so, Base Saturation Flow per Lane [pc/h/ln]	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Arrival type	3			3			3			3		
s, saturation flow rate [veh/h]	1781	1870	1589	1781	1816	1781	1870	1760	1781	1870	1797	
c, Capacity [veh/h]	160	350	635	164	311	129	695	654	307	882	847	
X, volume / capacity	0.91	0.71	0.66	0.82	0.95	0.92	0.95	0.96	0.96	0.83	0.85	
d, Delay for Lane Group [s/veh]	61.76	40.78	28.46	54.10	55.95	67.77	54.13	57.27	58.61	32.08	34.11	
Lane Group LOS	E	D	C	D	E	E	D	E	E	C	C	
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	Yes	No	No	

50th-Percentile Queue Length [veh/ln]	4.20	5.76	8.32	3.61	8.25	3.58	18.47	18.16	8.29	15.38	15.71
50th-Percentile Queue Length [ft/ln]	105.10	143.96	207.92	90.13	206.23	89.59	461.64	453.90	207.33	384.44	392.66
95th-Percentile Queue Length [veh/ln]	7.57	9.69	13.05	6.49	12.96	6.45	25.51	25.14	13.02	21.81	22.21
95th-Percentile Queue Length [ft/ln]	189.16	242.34	326.16	162.24	323.98	161.25	637.82	628.61	325.40	545.22	555.15

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	61.76	40.78	28.46	54.10	55.95	55.95	67.77	55.33	57.27	58.61	32.96	34.11
Movement LOS	E	D	C	D	E	E	E	E	E	E	C	C
Critical Movement	No	No	No	No	No	No	Yes	No	No	No	No	No
d_A, Approach Delay [s/veh]	38.16			55.37			56.69			37.38		
Approach LOS	D			E			E			D		
d_I, Intersection Delay [s/veh]	45.45											
Intersection LOS	D											
Intersection V/C	0.922											

Option 1: Copy of SR-74 @ Menifee Rd

Number	15											
Intersection	SR-74 @ Menifee Rd											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	Menifee Rd			Menifee Rd			SR-74			SR-74		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Base Volume Input [veh/h]	82	158	283	101	175	20	45	1080	102	229	888	93
Total Analysis Volume [veh/h]	94	181	325	116	201	35	72	1300	117	263	1057	107

Intersection Settings

Cycle Length [s]	100											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Fully actuated											
Lost time [s]	12.00											
Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lag	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	5	5	5	0	5	5	0	5	5	0
Maximum Green [s]	30	30	30	30	30	0	30	30	0	30	30	0
Amber [s]	3.9	3.0	3.0	3.0	3.9	0.0	3.0	4.7	0.0	3.0	4.7	0.0
All red [s]	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	12	20	20	12	20	0	47	49	0	19	21	0
Walk [s]	5	5	5	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	10	10	10	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No	No	No	No		No	No		No	No	
Maximum Recall	No	No	No	No	No		No	No		No	No	
Pedestrian Recall	No	No	No	No	No		No	No		No	No	
Pedestrian Signal Group	0											
Pedestrian Walk [s]	0											
Pedestrian Clearance [s]	0											

Lane Group Calculations

g / C, Green / Cycle	0.07	0.15	0.35	0.08	0.15	0.05	0.43	0.43	0.16	0.54	0.54	
(v / s)_i Volume / Saturation Flow Rate	0.05	0.10	0.20	0.07	0.13	0.04	0.38	0.39	0.15	0.32	0.32	
so, Base Saturation Flow per Lane [pc/h/ln]	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Arrival type	3			3			3			3		
s, saturation flow rate [veh/h]	1781	1870	1589	1781	1822	1781	1870	1816	1781	1870	1810	
c, Capacity [veh/h]	118	283	554	143	269	95	812	789	280	1006	974	
X, volume / capacity	0.79	0.64	0.59	0.81	0.88	0.75	0.88	0.89	0.94	0.59	0.59	
d, Delay for Lane Group [s/veh]	57.38	42.28	28.69	55.63	50.76	58.07	39.16	40.27	56.08	18.12	18.29	
Lane Group LOS	E	D	C	E	D	E	D	D	E	B	B	
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	Yes	No	No	

50th-Percentile Queue Length [veh/ln]	2.62	4.24	6.33	3.17	6.19	1.99	16.83	16.74	7.17	8.48	8.33
50th-Percentile Queue Length [ft/ln]	65.38	106.10	158.28	79.23	154.75	49.76	420.85	418.61	179.21	212.11	208.13
95th-Percentile Queue Length [veh/ln]	4.71	7.62	10.46	5.70	10.27	3.58	23.56	23.46	11.56	13.26	13.06
95th-Percentile Queue Length [ft/ln]	117.69	190.56	261.44	142.62	256.76	89.58	589.07	586.38	288.99	331.54	326.43

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	57.38	42.28	28.69	55.63	50.76	50.76	58.07	39.65	40.27	56.08	18.19	18.29
Movement LOS	E	D	C	E	D	D	E	D	D	E	B	B
Critical Movement	No	No	No	No	No	No	Yes	No	No	No	No	No
d_A, Approach Delay [s/veh]	37.29			52.37			40.59			25.18		
Approach LOS	D			D			D			C		
d_I, Intersection Delay [s/veh]	35.47											
Intersection LOS	D											
Intersection V/C	0.871											

Option 1: Copy of SR-74 @ Briggs Rd

Number	16											
Intersection	SR-74 @ Briggs Rd											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	Briggs Rd			Briggs Rd			SR-74			SR-74		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Base Volume Input [veh/h]	474	218	132	222	200	103	106	595	605	235	894	162
Total Analysis Volume [veh/h]	638	284	171	288	259	144	140	779	789	305	1193	209

Intersection Settings

Cycle Length [s]	105											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Fully actuated											
Lost time [s]	0.00											
Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	8	7	4	0
Auxiliary Signal Groups									1,8			
Lead / Lag	Lag	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	5	5	5	0
Maximum Green [s]	30	30	0	30	30	0	30	30	30	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	4.3	0.0	3.0	4.7	4.7	3.0	4.7	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	24	22	0	23	21	0	13	37	37	23	47	0
Walk [s]	5	5	0	0	5	0	0	5	5	0	5	0
Pedestrian Clearance [s]	10	10	0	0	10	0	0	10	10	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No	No	No	No	
Maximum Recall	No	No		No	No		No	No	No	No	No	
Pedestrian Recall	No	No		No	No		No	No	No	No	No	
Pedestrian Signal Group	0											
Pedestrian Walk [s]	0											
Pedestrian Clearance [s]	0											

Lane Group Calculations

g / C, Green / Cycle	0.19	0.17	0.17	0.18	0.15	0.15	0.09	0.30	0.74	0.18	0.39	0.39
(v / s)_i Volume / Saturation Flow Rate	0.18	0.15	0.11	0.16	0.14	0.09	0.08	0.22	0.50	0.17	0.38	0.39
so, Base Saturation Flow per Lane [pc/h/ln]	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Arrival type	3			3			3			3		
s, saturation flow rate [veh/h]	3459	1870	1589	1781	1870	1589	1781	3560	1589	1781	1870	1775
c, Capacity [veh/h]	657	325	276	317	280	238	156	1058	1178	325	733	696
X, volume / capacity	0.97	0.87	0.62	0.91	0.93	0.61	0.90	0.74	0.67	0.94	0.97	1.00
d, Delay for Lane Group [s/veh]	53.21	49.60	42.42	53.95	56.70	44.24	63.47	37.77	10.01	58.89	57.39	64.95
Lane Group LOS	D	D	D	D	E	D	E	D	B	E	E	E
Critical Lane Group	Yes	No	No	No	Yes	No	No	No	Yes	Yes	No	No

50th-Percentile Queue Length [veh/ln]	8.84	7.54	4.11	8.04	7.37	3.53	4.17	9.00	6.85	8.88	21.23	22.24
50th-Percentile Queue Length [ft/ln]	221.10	188.39	102.65	200.92	184.17	88.18	104.15	224.98	171.25	221.98	530.65	555.92
95th-Percentile Queue Length [veh/ln]	13.72	12.04	7.39	12.69	11.82	6.35	7.50	13.92	11.14	13.77	28.78	29.97
95th-Percentile Queue Length [ft/ln]	343.03	300.94	184.78	317.16	295.45	158.72	187.48	347.98	278.55	344.15	719.54	749.26

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	53.21	49.60	42.42	53.95	56.70	44.24	63.47	37.77	10.01	58.89	60.46	64.95
Movement LOS	D	D	D	D	E	D	E	D	B	E	E	E
Critical Movement	No	No	No	No	No	No	No	No	No	No	No	Yes
d_A, Approach Delay [s/veh]	50.58			52.96			27.06			60.73		
Approach LOS	D			D			C			E		
d_I, Intersection Delay [s/veh]	46.50											
Intersection LOS	D											
Intersection V/C	0.887											

Option 1: Copy of Matthews Rd @ Palomar Rd

Number	17					
Intersection	Matthews Rd @ Palomar Rd					
Control Type	All-way stop					
Analysis Method	HCM 6th Edition					
Name	Palomar Rd		Matthews Rd		Matthews Rd	
Approach	Southbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Base Volume Input [veh/h]	51	173	202	128	274	150
Total Analysis Volume [veh/h]	58	282	259	145	331	176

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	481	574	638	621
---------------------------------	-----	-----	-----	-----

Movement, Approach, & Intersection Results

Average Lane Delay [s/veh]	11.22	14.87	17.87	29.40
95th-Percentile Queue Length [veh]	0.41	2.70	4.49	8.39
95th-Percentile Queue Length [ft]	10.22	67.41	112.27	209.75
Approach Delay [s/veh]	14.25		17.87	29.40
Approach LOS	B		C	D
Intersection Delay [s/veh]	21.56			
Intersection LOS	C			

Appendix D-4

Opening Day with Cumulative Projects

Menifee Commerce Center

Vistro File: H:\...\19-239 Menifee Commerce Center
100k.vistro

Scenario 5 Opening Day + CP AM (2024)

Report File: H:\...\LOS - 3 Opening Day + CP AM.pdf

2021-08-12

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Case Rd/Bonnie Dr @ I-215 SB	Signalized	HCM 6th Edition	SB Thru	1.069	85.1	F
2	SR-74 @ I-215 NB	Signalized	HCM 6th Edition	SEB Left	0.828	19.0	B
3	SR-74 @ Trumble Rd	Signalized	HCM 6th Edition	NWB Right	0.870	41.3	D
4	SR-74 @ Sherman Rd	Signalized	HCM 6th Edition	SEB Left	0.720	20.8	C
5	Ethanac Rd @ Murrieta Rd	Signalized	HCM 6th Edition	EB Left	0.784	36.5	D
6	Ethanac Rd @ Case Rd/Barnett Rd	Signalized	HCM 6th Edition	WB Left	0.755	25.3	C
7	Ethanac Rd @ I-215 SB	Signalized	HCM 6th Edition	SB Left	1.005	61.7	E
8	Ethanac Rd @ I-215 NB	Signalized	HCM 6th Edition	NB Right	1.119	100.9	F
9	Ethanac Rd @ Encanto Dr	Two-way stop	HCM 6th Edition	NB Left	4.427	2,086.6	F
10	Ethanac Rd @ Trumble Rd	Signalized	HCM 6th Edition	EB Thru	1.142	98.1	F
11	Ethanac Rd @ Sherman Rd	Two-way stop	HCM 6th Edition	SB Thru	9.286	10,000.0	F
12	Ethanac Rd @ Dawson Rd	Two-way stop	HCM 6th Edition	NB Left	0.361	39.5	E
13	Ethanac Rd @ Antelope Rd	Two-way stop	HCM 6th Edition	SEB Left	0.116	31.5	D
14	SR-74 @ Palomar Rd	Signalized	HCM 6th Edition	EB Left	0.810	22.1	C
15	SR-74 @ Menifee Rd	Signalized	HCM 6th Edition	SB Thru	1.268	187.3	F
16	SR-74 @ Briggs Rd	Signalized	HCM 6th Edition	EB Right	1.345	201.3	F
17	Matthews Rd @ Palomar Rd	Two-way stop	HCM 6th Edition	SB Left	0.585	83.2	F
	McLaughlin Rd @ Murrieta		HCM 6th				

18	McLaughlin Rd @ Murrieta Rd	Two-way stop	HCM 6th Edition	EB Left	0.047	16.7	C
19	McLaughlin Rd @ Encanto Dr	Two-way stop	HCM 6th Edition	WB Left	0.101	14.6	B
20	McLaughlin Rd @ Trumble Rd	All-way stop	HCM 6th Edition	EB Thru	0.175	7.8	A
21	McLaughlin Rd @ Sherman Rd	Two-way stop	HCM 6th Edition	EB Left	0.286	10.4	B
22	Rouse Rd @ Murrieta Rd	Two-way stop	HCM 6th Edition	EB Left	0.076	17.9	C
23	Rouse Rd @ Encanto Dr	Two-way stop	HCM 6th Edition	WB Left	0.308	18.4	C
24	McCall Blvd @ Bradley Rd	Signalized	HCM 6th Edition	EB Left	0.862	23.8	C
25	McCall Blvd @ I-215 SB	Signalized	HCM 6th Edition	WB Left	0.884	35.2	D
26	McCall Blvd @ I-215 NB	Signalized	HCM 6th Edition	WB Thru	0.966	47.5	D
27	McCall Blvd @ Encanto Dr	Signalized	HCM 6th Edition	NB Left	0.944	49.0	D
28	Sherman Rd @ Project dwy 1	Two-way stop	HCM 6th Edition	WB Left	0.030	20.9	C
29	Sherman Rd @ Project dwy 2	Two-way stop	HCM 6th Edition	EB Left	0.031	12.2	B
30	Sherman Rd @ Project dwy 3	Two-way stop	HCM 6th Edition	EB Left	0.008	20.4	C
31	Trumble Rd @ Project dwy 4	Two-way stop	HCM 6th Edition	WB Left	0.002	8.6	A
32	Trumble Rd @ Project dwy 5	Two-way stop	HCM 6th Edition	WB Left	0.002	8.7	A
33	Dawson Rd @ Project dwy 6	Two-way stop	HCM 6th Edition	EB Left	0.043	9.9	A
34	Dawson Rd @ Project dwy 7	Two-way stop	HCM 6th Edition	EB Left	0.035	8.9	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Case Rd/Bonnie Dr @ I-215 SB

Control Type:	Signalized	Delay (sec / veh):	85.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.069

Intersection Setup

Name	Case Rd		I-215 SB		Bonnie Dr	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration	↵		↵		↵	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1
Entry Pocket Length [ft]	115.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Case Rd		I-215 SB		Bonnie Dr	
Base Volume Input [veh/h]	708	415	656	20	37	178
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	17	2	7	4	21	49
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	797	460	730	26	61	245
Peak Hour Factor	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	205	119	188	7	16	63
Total Analysis Volume [veh/h]	822	474	753	27	63	253
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing in	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	125
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Overlap	Split	Overlap
Signal Group	1	6	2	2	3	3
Auxiliary Signal Groups				1,2,3,6		1,2,3,6
Lead / Lag	Lag	-	-	-	Lead	-
Minimum Green [s]	5	5	5	5	5	5
Maximum Green [s]	30	30	30	30	30	30
Amber [s]	3.0	4.3	4.3	4.3	4.3	4.3
All red [s]	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	65	106	41	41	19	19
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	5	5	5	5	5
Pedestrian Clearance [s]	0	17	7	7	10	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	3.3	3.3	3.3	3.3	3.3
Minimum Recall	No	No	No	No	No	No
Maximum Recall	No	No	No	No	No	No
Pedestrian Recall	No	No	No	No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	R
C, Cycle Length [s]	125	125	125	125	125	125
L, Total Lost Time per Cycle [s]	4.00	5.30	5.30	5.30	5.30	5.30
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	3.30	3.30	0.00	3.30	0.00
g_i, Effective Green Time [s]	61	107	43	158	7	158
g / C, Green / Cycle	0.49	0.86	0.34	1.27	0.06	1.27
(v / s)_i Volume / Saturation Flow Rate	0.58	0.25	0.40	0.02	0.04	0.16
s, saturation flow rate [veh/h]	1417	1870	1870	1589	1781	1589
c, Capacity [veh/h]	721	1608	637	2013	99	2013
d1, Uniform Delay [s]	35.56	1.64	41.20	0.00	57.82	0.00
k, delay calibration	0.50	0.50	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	79.01	0.47	97.14	0.01	6.72	0.13
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	0.77	1.00	0.77
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.14	0.29	1.18	0.01	0.64	0.13
d, Delay for Lane Group [s/veh]	114.58	2.11	138.34	0.01	64.53	0.13
Lane Group LOS	F	A	F	A	E	A
Critical Lane Group	Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	37.69	1.03	35.89	0.01	2.09	0.07
50th-Percentile Queue Length [ft/ln]	942.20	25.81	897.28	0.17	52.34	1.80
95th-Percentile Queue Length [veh/ln]	52.65	1.86	50.89	0.01	3.77	0.13
95th-Percentile Queue Length [ft/ln]	1316.24	46.46	1272.25	0.31	94.20	3.23

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	114.58	2.11	138.34	0.01	64.53	0.13
Movement LOS	F	A	F	A	E	A
d_A, Approach Delay [s/veh]	73.44		133.55		12.97	
Approach LOS	E		F		B	
d_I, Intersection Delay [s/veh]	85.05					
Intersection LOS	F					
Intersection V/C	1.069					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	53.82	53.82	53.82
I_p,int, Pedestrian LOS Score for Intersection	2.990	2.599	3.695
Crosswalk LOS	C	B	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1611	571	219
d_b, Bicycle Delay [s]	2.36	31.90	49.55
I_b,int, Bicycle LOS Score for Intersection	3.698	2.847	1.560
Bicycle LOS	D	C	A

Sequence




Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: SR-74 @ I-215 NB

Control Type:	Signalized	Delay (sec / veh):	19.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.828

Intersection Setup

Name	I-215 NB		SR-74		Case Rd	
Approach	Southbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	150.00	245.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	I-215 NB		SR-74		Case Rd	
Base Volume Input [veh/h]	238	321	804	491	21	812
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	7	7	12	2	11	45
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	270	361	898	544	34	940
Peak Hour Factor	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	69	92	229	139	9	240
Total Analysis Volume [veh/h]	276	368	916	555	35	959
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing in	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Permissive	Overlap	Protected	Permissive
Signal Group	7	0	6	6	5	2
Auxiliary Signal Groups				2,5,6,7		
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	5	5	5	5
Maximum Green [s]	30	0	30	30	30	30
Amber [s]	4.3	0.0	4.3	4.3	3.0	4.3
All red [s]	1.0	0.0	1.0	1.0	1.0	1.0
Split [s]	11	0	25	25	24	49
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	3.0
Walk [s]	0	0	5	5	0	5
Pedestrian Clearance [s]	0	0	10	10	0	14
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	3.3	0.0	3.3	3.3	2.0	3.3
Minimum Recall	No		No	No	No	No
Maximum Recall	No		No	No	No	No
Pedestrian Recall	No		No	No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C
C, Cycle Length [s]	68	68	68	68	68
L, Total Lost Time per Cycle [s]	5.30	5.30	4.87	4.00	5.30
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	3.30	3.30	0.00	2.00	3.30
g_i, Effective Green Time [s]	28	22	83	3	29
g / C, Green / Cycle	0.42	0.32	1.22	0.05	0.43
(v / s)_i Volume / Saturation Flow Rate	0.39	0.26	0.35	0.02	0.27
s, saturation flow rate [veh/h]	1666	3560	1589	1417	3560
c, Capacity [veh/h]	693	1140	1944	135	1524
d1, Uniform Delay [s]	18.89	21.15	0.00	33.41	15.22
k, delay calibration	0.33	0.11	0.27	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	15.35	1.37	0.20	1.01	0.43
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	0.76	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.93	0.80	0.29	0.26	0.63
d, Delay for Lane Group [s/veh]	34.23	22.52	0.20	34.42	15.65
Lane Group LOS	C	C	A	C	B
Critical Lane Group	Yes	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	10.80	5.95	0.11	0.57	4.84
50th-Percentile Queue Length [ft/ln]	270.06	148.64	2.74	14.35	121.08
95th-Percentile Queue Length [veh/ln]	16.19	9.94	0.20	1.03	8.45
95th-Percentile Queue Length [ft/ln]	404.81	248.61	4.94	25.82	211.31

Movement, Approach, & Intersection Results

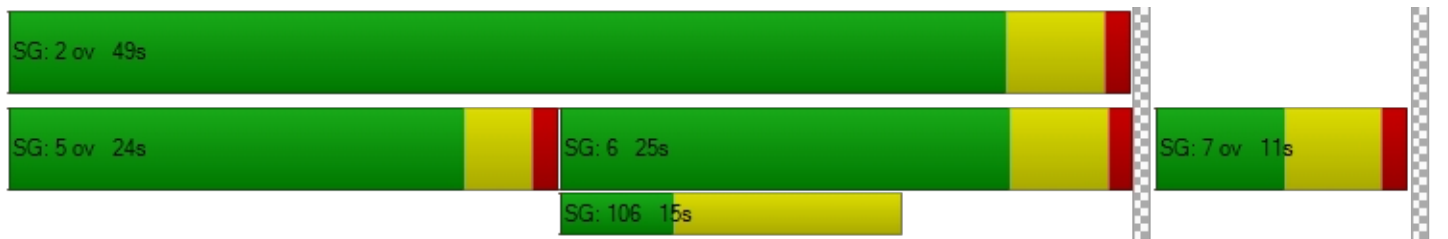
d_M, Delay for Movement [s/veh]	34.23	34.23	22.52	0.20	34.42	15.65
Movement LOS	C	C	C	A	C	B
d_A, Approach Delay [s/veh]	34.23		14.10		16.31	
Approach LOS	C		B		B	
d_I, Intersection Delay [s/veh]	18.98					
Intersection LOS	B					
Intersection V/C	0.828					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	5.7	5.7
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	24.57	24.57
I_p,int, Pedestrian LOS Score for Intersection	2.648	3.077	2.952
Crosswalk LOS	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	190	657	1457
d_b, Bicycle Delay [s]	24.57	13.53	2.21
I_b,int, Bicycle LOS Score for Intersection	2.622	2.773	2.380
Bicycle LOS	B	C	B

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: SR-74 @ Trumble Rd

Control Type:	Signalized	Delay (sec / veh):	41.3
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.870

Intersection Setup

Name	Trumble		SR-74		SR-74	
Approach	Southwestbound		Northwestbound		Southeastbound	
Lane Configuration	↵↵		↑↑		↵↑↑	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	255.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		Yes	

Volumes

Name	Trumble		SR-74		SR-74	
Base Volume Input [veh/h]	145	361	1040	90	228	754
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	28	0	13	6	0	52
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	188	398	1160	106	251	883
Peak Hour Factor	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	50	106	309	28	67	235
Total Analysis Volume [veh/h]	200	423	1234	113	267	939
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing in	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Protected	Permissive
Signal Group	7	0	6	0	5	2
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	5	0	5	5
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	4.3	0.0	4.3	0.0	3.0	4.3
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	21	0	21	0	18	39
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	10	0	10	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	3.3	0.0	3.3	0.0	2.0	3.3
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C	L	C
C, Cycle Length [s]	84	84	84	84	84	84
L, Total Lost Time per Cycle [s]	5.30	5.30	5.30	5.30	4.00	5.30
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.30	3.30	3.30	3.30	2.00	3.30
g_i, Effective Green Time [s]	25	25	30	30	15	49
g / C, Green / Cycle	0.29	0.29	0.36	0.36	0.18	0.58
(v / s)_i Volume / Saturation Flow Rate	0.11	0.27	0.36	0.37	0.15	0.26
s, saturation flow rate [veh/h]	1781	1589	1870	1816	1781	3560
c, Capacity [veh/h]	521	465	669	650	312	2068
d1, Uniform Delay [s]	23.60	28.55	26.89	26.89	33.52	10.00
k, delay calibration	0.11	0.24	0.43	0.45	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.46	13.91	33.71	43.11	6.73	0.16
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.38	0.91	1.01	1.04	0.86	0.45
d, Delay for Lane Group [s/veh]	24.06	42.45	60.60	70.00	40.25	10.16
Lane Group LOS	C	D	F	F	D	B
Critical Lane Group	No	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	2.97	9.23	18.13	19.30	5.49	4.00
50th-Percentile Queue Length [ft/ln]	74.32	230.77	453.18	482.57	137.34	99.88
95th-Percentile Queue Length [veh/ln]	5.35	14.21	25.22	27.16	9.34	7.19
95th-Percentile Queue Length [ft/ln]	133.77	355.33	630.53	678.94	233.44	179.78

Movement, Approach, & Intersection Results

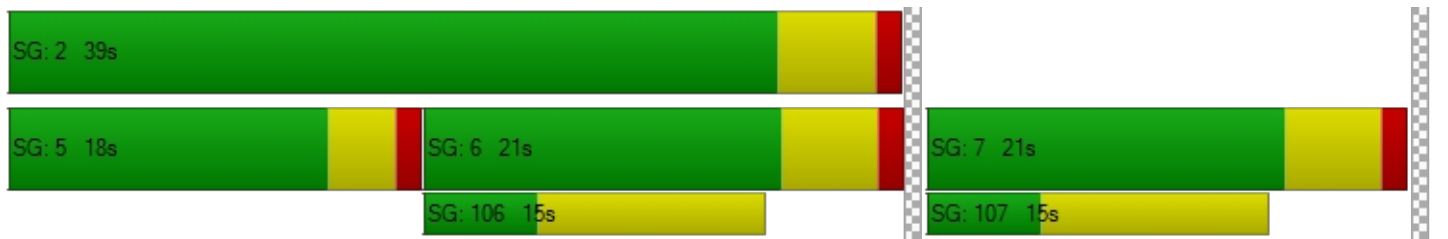
d_M, Delay for Movement [s/veh]	24.06	42.45	64.87	70.00	40.25	10.16
Movement LOS	C	D	E	E	D	B
d_A, Approach Delay [s/veh]	36.55		65.30		16.82	
Approach LOS	D		E		B	
d_I, Intersection Delay [s/veh]	41.25					
Intersection LOS	D					
Intersection V/C	0.870					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	21.68
I_p,int, Pedestrian LOS Score for Intersection	2.410	0.000	3.118
Crosswalk LOS	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	523	523	1123
d_b, Bicycle Delay [s]	16.35	16.35	5.76
I_b,int, Bicycle LOS Score for Intersection	1.560	2.671	2.555
Bicycle LOS	A	B	B

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 4: SR-74 @ Sherman Rd**

Control Type:	Signalized	Delay (sec / veh):	20.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.720

Intersection Setup

Name	Sherman Rd			Sherman Rd			SR-74			SR-74		
Approach	Southbound			Northeastbound			Northwestbound			Southeastbound		
Lane Configuration	Y			↶↷			↶↷			↶↷		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	120.00	185.00	100.00	100.00	270.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			40.00			30.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Sherman Rd			Sherman Rd			SR-74			SR-74		
Base Volume Input [veh/h]	0	2	92	63	16	146	118	1140	6	7	849	56
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	0	15	0	4	18	4	3	0	11	68
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	2	102	85	18	165	148	1261	9	7	947	129
Peak Hour Factor	0.9500	0.9400	0.9400	0.9400	0.9400	0.9500	0.9500	0.9500	0.9500	0.9400	0.9500	0.9400
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	27	23	5	43	39	332	2	2	249	34
Total Analysis Volume [veh/h]	1	2	109	90	19	174	156	1327	9	7	997	137
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	2	0	0	1	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.2	0.0	3.0	4.3	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	10	0	0	19	0	10	20	0	11	21	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.2	0.0	2.0	3.3	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	61	61	61	61	61	61	61	61	61
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.20	4.20	4.00	5.30	5.30
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.20	2.20	2.00	3.30	3.30
g_i, Effective Green Time [s]	5	9	9	7	29	29	1	22	22
g / C, Green / Cycle	0.09	0.15	0.15	0.11	0.49	0.49	0.01	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.07	0.06	0.11	0.09	0.36	0.36	0.00	0.31	0.31
s, saturation flow rate [veh/h]	1595	1796	1589	1781	1870	1866	1781	1870	1792
c, Capacity [veh/h]	144	266	235	205	908	905	16	676	648
d1, Uniform Delay [s]	27.01	23.45	24.74	26.05	12.51	12.52	29.91	17.92	17.94
k, delay calibration	0.11	0.11	0.11	0.11	0.24	0.24	0.11	0.16	0.16
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.60	1.01	4.51	5.75	2.65	2.67	16.41	4.69	4.93
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.78	0.41	0.74	0.76	0.74	0.74	0.42	0.86	0.86
d, Delay for Lane Group [s/veh]	35.61	24.46	29.25	31.80	15.17	15.19	46.32	22.61	22.87
Lane Group LOS	D	C	C	C	B	B	D	C	C
Critical Lane Group	Yes	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.87	1.35	2.44	2.38	6.68	6.68	0.17	6.90	6.67
50th-Percentile Queue Length [ft/ln]	46.72	33.78	61.10	59.52	167.12	166.98	4.18	172.51	166.67
95th-Percentile Queue Length [veh/ln]	3.36	2.43	4.40	4.29	10.92	10.92	0.30	11.21	10.90
95th-Percentile Queue Length [ft/ln]	84.09	60.81	109.99	107.13	273.12	272.95	7.52	280.22	272.54

Movement, Approach, & Intersection Results

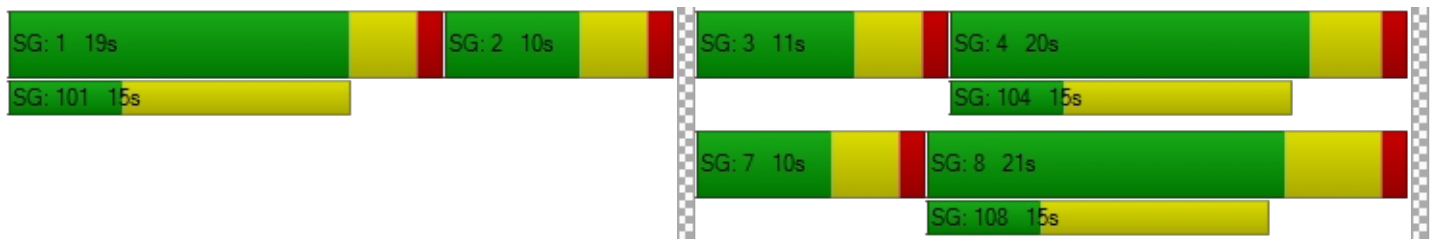
d_M, Delay for Movement [s/veh]	35.61	35.61	35.61	24.46	24.46	29.25	31.80	15.18	15.19	46.32	22.72	22.87
Movement LOS	D	D	D	C	C	C	C	B	B	D	C	C
d_A, Approach Delay [s/veh]	35.61			27.41			16.92			22.88		
Approach LOS	D			C			B			C		
d_I, Intersection Delay [s/veh]	20.84											
Intersection LOS	C											
Intersection V/C	0.720											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	21.68	21.68	0.00
I_p,int, Pedestrian LOS Score for Intersection	1.755	2.171	2.800	0.000
Crosswalk LOS	A	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	200	500	527	523
d_b, Bicycle Delay [s]	24.30	16.88	16.28	16.35
I_b,int, Bicycle LOS Score for Intersection	1.744	2.027	2.791	2.501
Bicycle LOS	A	B	C	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Ethanac Rd @ Murrieta Rd

Control Type:	Signalized	Delay (sec / veh):	36.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.784

Intersection Setup

Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	200.00	100.00	100.00	315.00	100.00	100.00	200.00	100.00	100.00	200.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			No		

Volumes

Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	184	188	145	19	43	13	10	574	78	102	495	330
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	83	9	0	0	0	191	0	36	138	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	202	208	243	30	48	15	11	824	86	148	684	366
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	55	57	66	8	13	4	3	224	23	40	186	99
Total Analysis Volume [veh/h]	220	226	264	33	52	16	12	896	93	161	743	398
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	1	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	4.3	0.0	3.0	4.7	0.0	3.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	21	0	0	24	0	21	23	0	22	24	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	3.3	0.0	2.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	86	86	86	86	86	86	86	86	86	86	86
L, Total Lost Time per Cycle [s]	4.00	4.00	5.30	5.30	5.30	4.00	5.70	5.70	4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	3.30	3.30	3.30	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	27	27	5	5	5	1	26	26	10	34	34
g / C, Green / Cycle	0.31	0.31	0.05	0.05	0.05	0.01	0.30	0.30	0.11	0.40	0.40
(v / s)_i Volume / Saturation Flow Rate	0.12	0.29	0.02	0.03	0.01	0.01	0.27	0.27	0.09	0.32	0.33
s, saturation flow rate [veh/h]	1781	1708	1781	1870	1589	1781	1870	1809	1781	1870	1655
c, Capacity [veh/h]	556	533	95	99	85	26	561	543	202	745	659
d1, Uniform Delay [s]	23.15	28.46	39.18	39.55	38.85	41.93	28.75	28.75	37.08	22.88	23.02
k, delay calibration	0.11	0.32	0.11	0.11	0.11	0.11	0.25	0.25	0.11	0.36	0.37
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.46	16.76	2.18	4.21	1.07	12.13	11.28	11.60	7.09	6.73	8.18
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.40	0.92	0.35	0.52	0.19	0.46	0.90	0.90	0.80	0.81	0.82
d, Delay for Lane Group [s/veh]	23.61	45.21	41.36	43.76	39.92	54.06	40.04	40.36	44.17	29.60	31.21
Lane Group LOS	C	D	D	D	D	D	D	D	D	C	C
Critical Lane Group	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.28	11.28	0.69	1.13	0.33	0.33	10.60	10.30	3.46	10.72	9.92
50th-Percentile Queue Length [ft/ln]	82.07	281.89	17.37	28.25	8.29	8.13	265.01	257.57	86.48	268.04	247.92
95th-Percentile Queue Length [veh/ln]	5.91	16.78	1.25	2.03	0.60	0.59	15.94	15.57	6.23	16.09	15.08
95th-Percentile Queue Length [ft/ln]	147.72	419.56	31.26	50.85	14.92	14.63	398.50	389.17	155.66	402.29	377.04

Movement, Approach, & Intersection Results

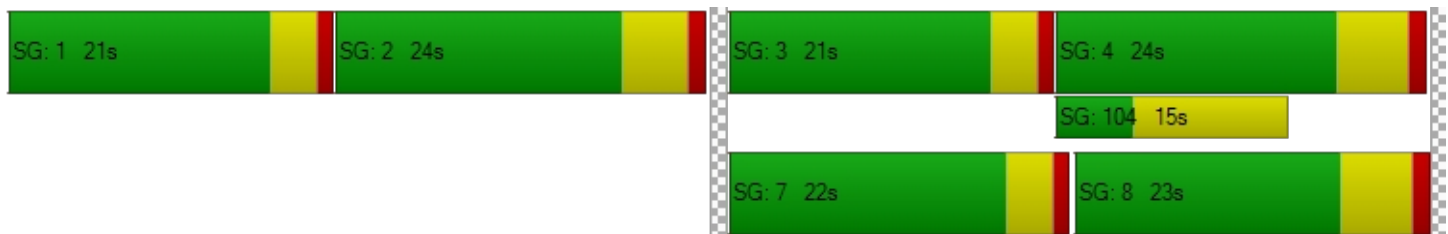
d_M, Delay for Movement [s/veh]	23.61	45.21	45.21	41.36	43.76	39.92	54.06	40.18	40.36	44.17	29.91	31.21
Movement LOS	C	D	D	D	D	D	D	D	D	D	C	C
d_A, Approach Delay [s/veh]	38.52			42.37			40.36			32.07		
Approach LOS	D			D			D			C		
d_I, Intersection Delay [s/veh]	36.54											
Intersection LOS	D											
Intersection V/C	0.784											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			9.0			0.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	0.00			36.45			0.00			0.00		
l_p,int, Pedestrian LOS Score for Intersection	0.000			2.402			0.000			0.000		
Crosswalk LOS	F			B			F			F		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	378			416			384			407		
d_b, Bicycle Delay [s]	29.61			28.24			29.36			28.56		
l_b,int, Bicycle LOS Score for Intersection	2.731			1.726			2.385			2.634		
Bicycle LOS	B			A			B			B		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Ethanac Rd @ Case Rd/Barnett Rd

Control Type:	Signalized	Delay (sec / veh):	25.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.755

Intersection Setup

Name	Barnett Rd			Case Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			T T T T			T T T			T T T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	230.00	100.00	120.00	150.00	100.00	100.00	110.00	100.00	270.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			40.00			30.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Barnett Rd			Case Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	21	3	80	310	0	118	109	728	26	60	870	352
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0000	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0000	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	56	0	0	0	0	283	0	30	175	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	23	3	144	341	0	130	120	1085	29	96	1134	388
Peak Hour Factor	0.9300	0.9300	0.9300	0.9300	1.0000	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	1	39	92	0	35	32	292	8	26	305	104
Total Analysis Volume [veh/h]	25	3	155	367	0	140	129	1167	31	103	1219	417
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Permiss	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	7	0	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	0	5	0	5	0	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	30	0	0	30	30	0	30	30	0
Amber [s]	0.0	3.2	0.0	3.0	0.0	0.0	3.0	3.2	0.0	3.0	4.7	0.0
All red [s]	0.0	1.0	0.0	1.0	0.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	10	0	34	0	0	9	30	0	16	37	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	0.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	5	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	10	0	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No		No				No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	0.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	2.0	0.0	0.0	2.0	2.2	0.0	2.0	3.7	0.0
Minimum Recall		No		No			No	No		No	No	
Maximum Recall		No		No			No	No		No	No	
Pedestrian Recall		No		No			No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	R	L	C	R	L	C	R
C, Cycle Length [s]	75	75	75	75	75	75	75	75	75
L, Total Lost Time per Cycle [s]	4.20	4.00	4.00	4.00	4.20	4.20	4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.00	2.00	2.00	2.20	2.20	2.00	3.70	3.70
g_i, Effective Green Time [s]	10	11	11	7	31	31	6	28	28
g / C, Green / Cycle	0.14	0.15	0.15	0.09	0.42	0.42	0.08	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.11	0.11	0.05	0.07	0.33	0.02	0.06	0.34	0.26
s, saturation flow rate [veh/h]	1617	3459	2813	1781	3560	1589	1781	3560	1589
c, Capacity [veh/h]	226	508	413	169	1489	665	136	1354	604
d1, Uniform Delay [s]	31.33	30.59	28.78	33.19	18.91	12.97	34.00	21.95	19.57
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.17
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.71	1.96	0.48	7.02	0.94	0.03	8.20	2.47	2.28
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.81	0.72	0.34	0.76	0.78	0.05	0.76	0.90	0.69
d, Delay for Lane Group [s/veh]	38.04	32.56	29.26	40.21	19.85	12.99	42.20	24.42	21.85
Lane Group LOS	D	C	C	D	B	B	D	C	C
Critical Lane Group	Yes	Yes	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	3.52	3.10	1.09	2.55	8.20	0.30	2.00	8.91	5.53
50th-Percentile Queue Length [ft/ln]	88.06	77.51	27.26	63.74	205.02	7.42	49.95	222.70	138.33
95th-Percentile Queue Length [veh/ln]	6.34	5.58	1.96	4.59	12.90	0.53	3.60	13.80	9.39
95th-Percentile Queue Length [ft/ln]	158.50	139.51	49.07	114.73	322.43	13.36	89.91	345.07	234.77

Movement, Approach, & Intersection Results

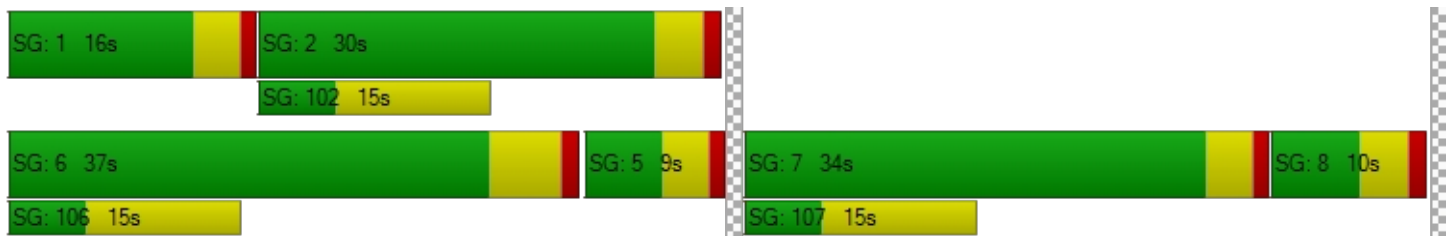
d_M, Delay for Movement [s/veh]	38.04	38.04	38.04	32.56	0.00	29.26	40.21	19.85	12.99	42.20	24.42	21.85
Movement LOS	D	D	D	C		C	D	B	B	D	C	C
d_A, Approach Delay [s/veh]	38.04			31.65			21.67			24.85		
Approach LOS	D			C			C			C		
d_I, Intersection Delay [s/veh]	25.29											
Intersection LOS	C											
Intersection V/C	0.755											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	0.00
I_p,int, Pedestrian LOS Score for Intersection	1.871	2.576	2.895	0.000
Crosswalk LOS	A	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	129	667	573	696
d_b, Bicycle Delay [s]	39.39	20.00	22.90	19.14
I_b,int, Bicycle LOS Score for Intersection	1.862	1.560	2.654	2.994
Bicycle LOS	A	A	B	C

Sequence




Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 7: Ethanac Rd @ I-215 SB**

Control Type:	Signalized	Delay (sec / veh):	61.7
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.005

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	240.00	100.00	100.00	100.00	275.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			45.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name				I-215 SB			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	0	0	0	103	1	200	0	589	402	112	619	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0600	1.0600	1.0600	1.0000	1.0600	1.0600	1.0600	1.0600	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0600	1.0600	1.0600	1.0000	1.0600	1.0600	1.0600	1.0600	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	396	0	73	0	242	97	89	132	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	512	1	298	0	903	549	215	827	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9600	0.9600	0.9600	1.0000	0.9600	0.9600	0.9600	0.9600	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	133	0	78	0	235	143	56	215	0
Total Analysis Volume [veh/h]	0	0	0	533	1	310	0	941	572	224	861	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	105
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	5	0	0	5	0	5	5	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	4.3	0.0	0.0	4.7	0.0	3.0	4.7	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	33	0	0	56	0	16	72	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	10	0	0	10	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	3.3	0.0	0.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall					No			No		No	No	
Maximum Recall					No			No		No	No	
Pedestrian Recall					No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		C	R	C	R	L	C
C, Cycle Length [s]		105	105	105	105	105	105
L, Total Lost Time per Cycle [s]		5.30	5.30	5.70	5.70	4.00	5.70
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		3.30	3.30	3.70	3.70	2.00	3.70
g_i, Effective Green Time [s]		28	28	47	47	15	66
g / C, Green / Cycle		0.26	0.26	0.45	0.45	0.15	0.63
(v / s)_i Volume / Saturation Flow Rate		0.30	0.20	0.50	0.36	0.13	0.24
s, saturation flow rate [veh/h]		1781	1589	1870	1589	1781	3560
c, Capacity [veh/h]		470	419	835	710	261	2248
d1, Uniform Delay [s]		38.65	35.34	29.04	25.10	43.75	9.41
k, delay calibration		0.46	0.20	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		82.86	4.63	72.01	9.47	8.04	0.50
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		1.14	0.74	1.13	0.81	0.86	0.38
d, Delay for Lane Group [s/veh]		121.50	39.97	101.06	34.57	51.79	9.91
Lane Group LOS		F	D	F	C	D	A
Critical Lane Group		Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		22.25	7.44	35.35	12.89	5.99	4.11
50th-Percentile Queue Length [ft/ln]		556.29	185.89	883.63	322.34	149.76	102.65
95th-Percentile Queue Length [veh/ln]		32.30	11.91	49.18	18.78	10.00	7.39
95th-Percentile Queue Length [ft/ln]		807.40	297.69	1229.57	469.57	250.11	184.77

Movement, Approach, & Intersection Results

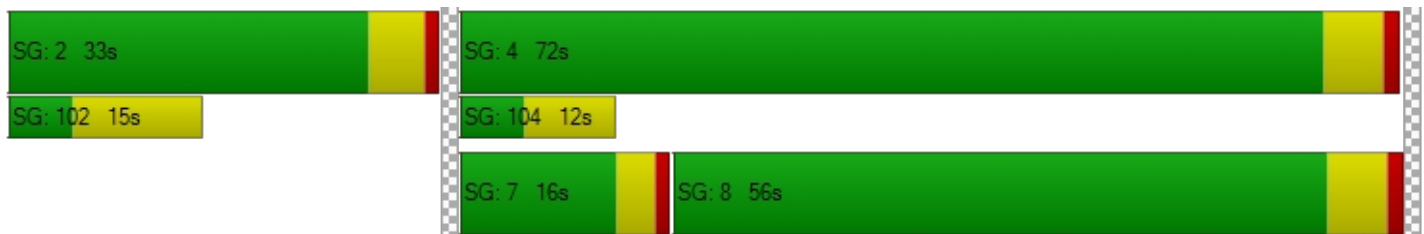
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	121.50	121.50	39.97	0.00	101.06	34.57	51.79	9.91	0.00
Movement LOS				F	F	D		F	C	D	A	
d_A, Approach Delay [s/veh]	0.00			91.56			75.92			18.55		
Approach LOS	A			F			E			B		
d_I, Intersection Delay [s/veh]	61.67											
Intersection LOS	E											
Intersection V/C	1.005											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	43.89	0.00	43.89
I_p,int, Pedestrian LOS Score for Intersection	0.000	2.341	0.000	3.180
Crosswalk LOS	F	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	528	958	1263
d_b, Bicycle Delay [s]	52.50	28.45	14.25	7.13
I_b,int, Bicycle LOS Score for Intersection	4.132	2.952	4.056	2.455
Bicycle LOS	D	C	D	B

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 8: Ethanac Rd @ I-215 NB**

Control Type:	Signalized	Delay (sec / veh):	100.9
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.119

Intersection Setup

Name	I-215 NB						Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	265.00	100.00	100.00	100.00	245.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name	I-215 NB						Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	288	3	109	0	0	0	204	487	0	0	456	152
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0000	1.0000	1.0000	1.0600	1.0600	1.0000	1.0000	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0000	1.0000	1.0000	1.0600	1.0600	1.0000	1.0000	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	73	0	290	0	0	0	97	541	0	0	148	125
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	396	3	413	0	0	0	326	1088	0	0	660	296
Peak Hour Factor	0.9400	0.9400	0.9400	1.0000	1.0000	1.0000	0.9400	0.9400	1.0000	1.0000	0.9400	0.9400
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	105	1	110	0	0	0	87	289	0	0	176	79
Total Analysis Volume [veh/h]	421	3	439	0	0	0	347	1157	0	0	702	315
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	0	0	0	5	5	0	0	5	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	3.2	0.0	0.0	0.0	0.0	3.0	4.7	0.0	0.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	31	0	0	0	0	24	89	0	0	65	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	7	0	0	0	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	0.0	0.0	2.0	3.7	0.0	0.0	3.7	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R		L	C	C
C, Cycle Length [s]	120	120		120	120	120
L, Total Lost Time per Cycle [s]	4.20	4.20		4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20		2.00	3.70	3.70
g_i, Effective Green Time [s]	27	27		26	83	54
g / C, Green / Cycle	0.22	0.22		0.21	0.69	0.45
(v / s)_i Volume / Saturation Flow Rate	0.24	0.28		0.19	0.62	0.57
s, saturation flow rate [veh/h]	1782	1589		1781	1870	1773
c, Capacity [veh/h]	398	355		380	1298	793
d1, Uniform Delay [s]	46.58	46.58		46.10	14.73	33.15
k, delay calibration	0.41	0.50		0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	59.34	128.21		8.78	9.53	136.63
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.07	1.24		0.91	0.89	1.28
d, Delay for Lane Group [s/veh]	105.92	174.80		54.88	24.26	169.78
Lane Group LOS	F	F		D	C	F
Critical Lane Group	No	Yes		Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	18.35	23.17		10.59	22.87	51.09
50th-Percentile Queue Length [ft/ln]	458.80	579.20		264.74	571.64	1277.28
95th-Percentile Queue Length [veh/ln]	26.30	34.65		15.93	30.71	74.23
95th-Percentile Queue Length [ft/ln]	657.52	866.35		398.16	767.69	1855.84

Movement, Approach, & Intersection Results

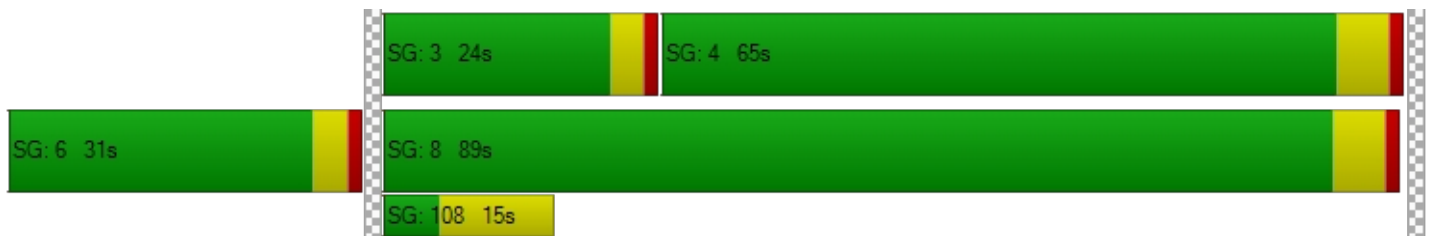
d_M, Delay for Movement [s/veh]	105.92	105.92	174.80	0.00	0.00	0.00	54.88	24.26	0.00	0.00	169.78	169.78
Movement LOS	F	F	F				D	C			F	F
d_A, Approach Delay [s/veh]	140.96			0.00			31.32			169.78		
Approach LOS	F			A			C			F		
d_I, Intersection Delay [s/veh]	100.89											
Intersection LOS	F											
Intersection V/C	1.119											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.151	0.000	0.000	0.000
Crosswalk LOS	B	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	447	0	1388	988
d_b, Bicycle Delay [s]	36.19	60.00	5.61	15.35
I_b,int, Bicycle LOS Score for Intersection	2.984	4.132	4.041	3.238
Bicycle LOS	C	D	D	C

Sequence

Ring 1	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 9: Ethanac Rd @ Encanto Dr

Control Type:	Two-way stop	Delay (sec / veh):	2,086.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	4.427

Intersection Setup

Name	Encanto Dr		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Encanto Dr		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	92	75	485	115	41	519
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	827	4	0	273
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	104	85	1372	133	46	856
Peak Hour Factor	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	28	23	369	36	12	230
Total Analysis Volume [veh/h]	112	91	1475	143	49	920
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	1	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	4.43	0.65	0.01	0.00	0.12	0.01
d_M, Delay for Movement [s/veh]	2086.60	1969.88	0.00	0.00	15.18	0.00
Movement LOS	F	F	A	A	C	A
95th-Percentile Queue Length [veh/ln]	23.60	23.60	0.00	0.00	0.41	0.00
95th-Percentile Queue Length [ft/ln]	589.99	589.99	0.00	0.00	10.30	0.00
d_A, Approach Delay [s/veh]	2034.28		0.00		0.77	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	148.28					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 10: Ethanac Rd @ Trumble Rd

Control Type:	Signalized	Delay (sec / veh):	98.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.142

Intersection Setup

Name	Trumble Rd			Trumble Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇐⇑⇐			⇑⇐⇑			⇑⇑⇑			⇑⇐⇑		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	85.00	100.00	100.00	100.00	100.00	100.00	155.00	100.00	100.00	110.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Trumble Rd			Trumble Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	4	1	6	17	1	138	109	432	2	7	437	14
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	3	0	4	16	811	0	0	269	13
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	1	6	22	1	159	139	1296	2	7	760	29
Peak Hour Factor	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	2	6	0	45	39	364	1	2	213	8
Total Analysis Volume [veh/h]	4	1	7	25	1	179	156	1456	2	8	854	33
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	75
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	0	5	5	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.2	0.0	3.0	3.2	0.0	3.0	4.7	0.0	3.0	4.7	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	18	20	0	10	11	0	9	37	0	9	37	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	5	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	10	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.2	0.0	2.0	2.2	0.0	2.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C
C, Cycle Length [s]	75	75	75	75	75	75	75	75	75
L, Total Lost Time per Cycle [s]	4.00	4.20	4.00	4.20	4.00	5.70	5.70	4.00	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.20	2.00	2.20	2.00	3.70	3.70	2.00	3.70
g_i, Effective Green Time [s]	0	9	2	10	8	46	46	1	38
g / C, Green / Cycle	0.01	0.12	0.03	0.14	0.11	0.61	0.61	0.01	0.51
(v / s)_i Volume / Saturation Flow Rate	0.00	0.00	0.01	0.11	0.09	0.78	0.00	0.00	0.48
s, saturation flow rate [veh/h]	1781	1620	1781	1591	1781	1870	1589	1781	1858
c, Capacity [veh/h]	12	189	51	221	197	1130	961	21	939
d1, Uniform Delay [s]	37.18	29.48	35.99	31.46	32.60	14.88	5.89	36.91	17.61
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	14.25	0.09	6.94	7.13	6.93	136.42	0.00	10.99	18.68
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.32	0.04	0.49	0.81	0.79	1.29	0.00	0.38	0.94
d, Delay for Lane Group [s/veh]	51.43	29.57	42.92	38.58	39.53	151.30	5.90	47.89	36.29
Lane Group LOS	D	C	D	D	D	F	A	D	D
Critical Lane Group	Yes	No	No	Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.12	0.13	0.54	3.50	2.90	55.48	0.01	0.20	15.91
50th-Percentile Queue Length [ft/ln]	3.02	3.25	13.51	87.54	72.62	1386.88	0.25	4.99	397.67
95th-Percentile Queue Length [veh/ln]	0.22	0.23	0.97	6.30	5.23	81.61	0.02	0.36	22.45
95th-Percentile Queue Length [ft/ln]	5.43	5.84	24.31	157.57	130.72	2040.17	0.45	8.97	561.19

Movement, Approach, & Intersection Results

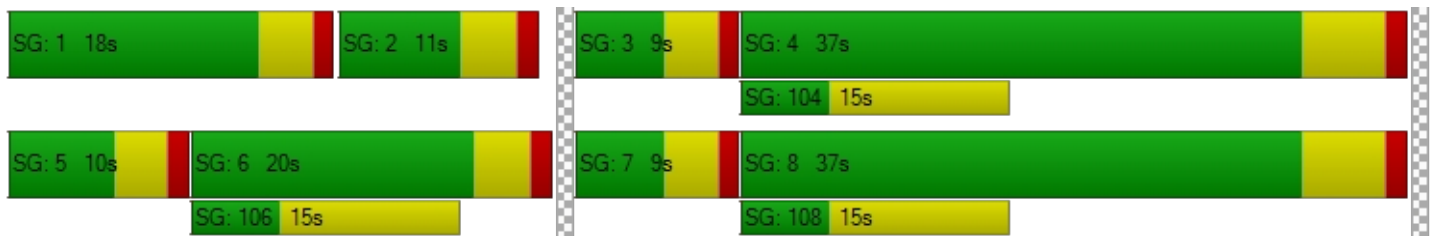
d_M, Delay for Movement [s/veh]	51.43	29.57	29.57	42.92	38.58	38.58	39.53	151.30	5.90	47.89	36.29	36.29
Movement LOS	D	C	C	D	D	D	D	F	A	D	D	D
d_A, Approach Delay [s/veh]	36.86			39.11			140.31			36.40		
Approach LOS	D			D			F			D		
d_I, Intersection Delay [s/veh]	98.13											
Intersection LOS	F											
Intersection V/C	1.142											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	29.04	29.04	0.00	29.04
I_p,int, Pedestrian LOS Score for Intersection	1.940	2.061	0.000	3.223
Crosswalk LOS	A	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	421	181	835	835
d_b, Bicycle Delay [s]	23.36	31.01	12.73	12.73
I_b,int, Bicycle LOS Score for Intersection	1.579	1.898	4.223	3.036
Bicycle LOS	A	A	D	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 11: Ethanac Rd @ Sherman Rd

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	9.286

Intersection Setup

Name	Sherman Rd			Sherman Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Sherman Rd			Sherman Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	6	3	2	4	3	102	97	340	13	8	354	3
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	145	12	18	20	54	13	3	307	504	80	124	5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	151	15	20	24	57	127	112	689	519	88	522	8
Peak Hour Factor	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	42	4	6	7	16	36	31	194	146	25	147	2
Total Analysis Volume [veh/h]	170	17	22	27	64	143	126	774	583	99	587	9
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	1.62	0.08	0.00	9.29	0.28	0.13	0.01	0.01	0.20	0.01	0.00
d_M, Delay for Movement [s/veh]	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	9.21	0.00	0.00	13.82	0.00	0.00
Movement LOS	F	F	F	F	F	F	A	A	A	B	A	A
95th-Percentile Queue Length [veh/ln]	28.84	28.84	28.84	31.99	31.99	31.99	0.44	0.44	0.44	0.72	0.72	0.72
95th-Percentile Queue Length [ft/ln]	721.06	721.06	721.06	799.82	799.82	799.82	11.01	11.01	11.01	17.95	17.95	17.95
d_A, Approach Delay [s/veh]	10000.00			10000.00			0.78			1.97		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	1691.16											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 12: Ethanac Rd @ Dawson Rd

Control Type:	Two-way stop	Delay (sec / veh):	39.5
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.361

Intersection Setup

Name	Dawson Rd		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Dawson Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	2	377	1	3	332
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	55	7	134	211	31	154
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	55	9	558	212	34	527
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	2	147	56	9	139
Total Analysis Volume [veh/h]	58	9	587	223	36	555
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.36	0.02	0.01	0.00	0.04	0.01
d_M, Delay for Movement [s/veh]	39.50	25.28	0.00	0.00	9.62	0.00
Movement LOS	E	D	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.65	1.65	0.00	0.00	0.14	0.14
95th-Percentile Queue Length [ft/ln]	41.22	41.22	0.00	0.00	3.46	3.46
d_A, Approach Delay [s/veh]	37.59		0.00		0.59	
Approach LOS	E		A		A	
d_I, Intersection Delay [s/veh]	1.95					
Intersection LOS	E					

Intersection Level Of Service Report
Intersection 13: Ethanac Rd @ Antelope Rd

Control Type:	Two-way stop	Delay (sec / veh):	31.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.116

Intersection Setup

Name	Antelope Rd			Ethanac Rd			Matthews Rd			Antelope Rd		
Approach	Northbound			Eastbound			Westbound			Southeastbound		
Lane Configuration	←			→			↑			↘		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	250.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			50.00			50.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Antelope Rd			Ethanac Rd			Matthews Rd			Antelope Rd		
Base Volume Input [veh/h]	9	0	2	1	399	8	2	348	26	15	1	0
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0000	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	141	0	0	185	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	0	2	1	581	8	2	569	29	17	1	0
Peak Hour Factor	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	0	1	0	151	2	1	148	8	4	0	0
Total Analysis Volume [veh/h]	10	0	2	1	605	8	2	593	30	18	1	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Free	Free	Stop
Flared Lane	No			No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No			No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.12	0.01	0.00
d_M, Delay for Movement [s/veh]	29.61	26.98	13.73	8.76	0.00	0.00	8.73	0.00	0.00	31.46	28.47	15.45
Movement LOS	D	D	B	A	A	A	A	A	A	D	D	C
95th-Percentile Queue Length [veh/ln]	0.22	0.22	0.22	0.00	0.00	0.00	0.01	0.01	0.01	0.41	0.41	0.41
95th-Percentile Queue Length [ft/ln]	5.43	5.43	5.43	0.08	0.08	0.00	0.16	0.16	0.16	10.18	10.18	10.18
d_A, Approach Delay [s/veh]	26.96			0.01			0.03			31.30		
Approach LOS	D			A			A			D		
d_I, Intersection Delay [s/veh]	0.74											
Intersection LOS	D											

**Intersection Level Of Service Report
Intersection 14: SR-74 @ Palomar Rd**

Control Type:	Signalized	Delay (sec / veh):	22.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.810

Intersection Setup

Name	Palomar Rd			Palomar Rd			SR-74			SR-74		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	200.00	100.00	200.00	190.00	100.00	100.00	240.00	100.00	100.00	230.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Palomar Rd			Palomar Rd			SR-74			SR-74		
Base Volume Input [veh/h]	108	53	231	64	73	34	20	911	42	148	1025	29
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	51	0	9	0	0	12	0	103	7	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	119	60	305	71	90	37	22	1016	47	266	1137	32
Peak Hour Factor	0.9500	0.9400	0.9400	0.9400	0.9400	0.9500	0.9500	0.9500	0.9500	0.9400	0.9500	0.9400
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	31	16	81	19	24	10	6	267	12	71	299	9
Total Analysis Volume [veh/h]	125	64	324	76	96	39	23	1069	49	283	1197	34
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	4.3	0.0	0.0	4.3	0.0	3.0	4.3	0.0	3.0	4.3	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	30	0	0	30	0	30	30	0	30	30	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.3	0.0	0.0	3.3	0.0	2.0	3.3	0.0	2.0	3.3	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	67	67	67	67	67	67	67	67	67	67	67	67
L, Total Lost Time per Cycle [s]	5.30	5.30	5.30	5.30	5.30	5.30	4.00	5.30	5.30	4.00	5.30	5.30
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.30	3.30	3.30	3.30	3.30	3.30	2.00	3.30	3.30	2.00	3.30	3.30
g_i, Effective Green Time [s]	16	16	16	16	16	16	2	23	23	13	34	34
g / C, Green / Cycle	0.24	0.24	0.24	0.24	0.24	0.24	0.03	0.35	0.35	0.19	0.51	0.51
(v / s)_i Volume / Saturation Flow Rate	0.10	0.03	0.20	0.06	0.04	0.04	0.01	0.30	0.30	0.16	0.33	0.33
s, saturation flow rate [veh/h]	1254	1870	1589	1338	1870	1694	1781	1870	1841	1781	1870	1852
c, Capacity [veh/h]	338	455	387	359	455	412	47	648	638	341	957	948
d1, Uniform Delay [s]	24.72	19.80	24.02	23.37	19.85	19.90	32.09	20.41	20.42	25.96	11.88	11.90
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.19	0.19	0.11	0.24	0.24
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.67	0.14	4.86	0.29	0.15	0.18	7.85	6.32	6.44	5.20	1.59	1.63
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.37	0.14	0.84	0.21	0.15	0.16	0.49	0.87	0.87	0.83	0.65	0.65
d, Delay for Lane Group [s/veh]	25.39	19.94	28.87	23.66	20.00	20.08	39.95	26.74	26.86	31.16	13.48	13.53
Lane Group LOS	C	B	C	C	C	C	D	C	C	C	B	B
Critical Lane Group	No	No	Yes	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.67	0.71	4.77	0.95	0.77	0.74	0.44	8.02	7.92	4.33	5.48	5.46
50th-Percentile Queue Length [ft/ln]	41.69	17.75	119.35	23.86	19.15	18.50	10.97	200.51	198.05	108.28	136.91	136.40
95th-Percentile Queue Length [veh/ln]	3.00	1.28	8.36	1.72	1.38	1.33	0.79	12.66	12.54	7.74	9.31	9.29
95th-Percentile Queue Length [ft/ln]	75.04	31.95	208.94	42.94	34.47	33.31	19.75	316.62	313.45	193.61	232.85	232.17

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	25.39	19.94	28.87	23.66	20.03	20.08	39.95	26.79	26.86	31.16	13.51	13.53
Movement LOS	C	B	C	C	C	C	D	C	C	C	B	B
d_A, Approach Delay [s/veh]	26.91			21.34			27.06			16.81		
Approach LOS	C			C			C			B		
d_I, Intersection Delay [s/veh]	22.09											
Intersection LOS	C											
Intersection V/C	0.810											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.577	2.254	3.211	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	549	549	549	549
d_b, Bicycle Delay [s]	23.69	23.69	23.69	23.69
I_b,int, Bicycle LOS Score for Intersection	2.406	1.734	2.501	2.809
Bicycle LOS	B	A	B	C

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 15: SR-74 @ Menifee Rd**

Control Type:	Signalized	Delay (sec / veh):	187.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.268

Intersection Setup

Name	Menifee Rd			Menifee Rd			SR-74			SR-74		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	350.00	100.00	100.00	350.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Menifee Rd			Menifee Rd			SR-74			SR-74		
Base Volume Input [veh/h]	123	212	359	114	210	25	98	897	189	251	1050	142
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	82	0	0	47	38	24	0	45	62	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	136	233	477	126	231	75	146	1013	209	322	1220	157
Peak Hour Factor	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	36	62	127	34	61	20	39	269	56	86	324	42
Total Analysis Volume [veh/h]	145	248	507	134	246	80	155	1078	222	343	1298	167
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	1	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.9	0.0	0.0	3.9	0.0	3.0	4.7	0.0	3.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	28	0	0	23	0	12	41	0	18	47	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.9	0.0	0.0	2.9	0.0	2.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.90	4.90	4.90	4.00	5.70	5.70	4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.90	2.90	2.90	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	23	23	18	8	26	26	23	41	41
g / C, Green / Cycle	0.21	0.21	0.16	0.07	0.24	0.24	0.21	0.37	0.37
(v / s)_i Volume / Saturation Flow Rate	0.21	0.32	0.26	0.09	0.36	0.36	0.19	0.39	0.41
s, saturation flow rate [veh/h]	1836	1589	1789	1781	1870	1761	1781	1870	1797
c, Capacity [veh/h]	386	334	291	134	442	416	381	701	673
d1, Uniform Delay [s]	43.49	43.49	46.09	50.91	42.05	42.05	42.15	34.43	34.43
k, delay calibration	0.28	0.50	0.39	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	39.05	248.27	273.12	87.18	238.72	248.89	7.88	48.14	58.93
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.02	1.52	1.58	1.16	1.50	1.53	0.90	1.05	1.08
d, Delay for Lane Group [s/veh]	82.54	291.77	319.22	138.09	280.77	290.94	50.03	82.57	93.35
Lane Group LOS	F	F	F	F	F	F	D	F	F
Critical Lane Group	No	Yes	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	14.34	31.82	29.84	6.80	40.62	39.43	9.44	26.55	27.53
50th-Percentile Queue Length [ft/ln]	358.57	795.45	745.96	170.08	1015.38	985.80	235.93	663.68	688.33
95th-Percentile Queue Length [veh/ln]	20.77	49.36	46.40	11.60	61.89	60.50	14.48	36.25	38.17
95th-Percentile Queue Length [ft/ln]	519.27	1234.05	1160.12	290.05	1547.35	1512.46	361.88	906.31	954.27

Movement, Approach, & Intersection Results

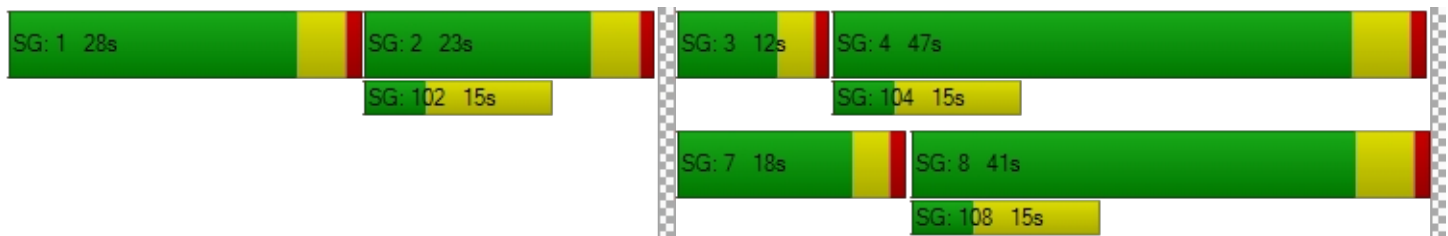
d_M, Delay for Movement [s/veh]	82.54	82.54	291.77	319.22	319.22	319.22	138.09	284.67	290.94	50.03	87.23	93.35
Movement LOS	F	F	F	F	F	F	F	F	F	D	F	F
d_A, Approach Delay [s/veh]	200.40			319.22			270.01			80.74		
Approach LOS	F			F			F			F		
d_I, Intersection Delay [s/veh]	187.34											
Intersection LOS	F											
Intersection V/C	1.268											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	46.37	46.37	46.37	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.693	2.396	3.279	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	420	329	642	751
d_b, Bicycle Delay [s]	34.33	38.39	25.36	21.45
I_b,int, Bicycle LOS Score for Intersection	3.045	2.319	2.760	3.051
Bicycle LOS	C	B	C	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 16: SR-74 @ Briggs Rd

Control Type:	Signalized	Delay (sec / veh):	201.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.345

Intersection Setup

Name	Briggs Rd			Briggs Rd			SR-74			SR-74		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	200.00	100.00	100.00	150.00	100.00	100.00	130.00	100.00	1084.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Briggs Rd			Briggs Rd			SR-74			SR-74		
Base Volume Input [veh/h]	474	218	132	222	200	103	106	595	605	235	894	162
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	63	0	0	0	0	9	2	18	86	0	35	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	586	241	145	245	220	122	119	674	753	259	1021	178
Peak Hour Factor	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	172	71	43	72	65	36	35	198	221	76	300	52
Total Analysis Volume [veh/h]	689	284	171	288	259	144	140	793	886	305	1201	209
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	1	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	4.3	0.0	3.0	4.7	0.0	3.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	30	0	0	21	0	13	60	0	9	56	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	3.3	0.0	2.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	5.30	5.30	4.00	5.70	5.70	4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	3.30	3.30	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	26	26	16	16	9	37	37	23	50	50
g / C, Green / Cycle	0.22	0.22	0.13	0.13	0.08	0.30	0.30	0.19	0.42	0.42
(v / s)_i Volume / Saturation Flow Rate	0.39	0.26	0.16	0.23	0.08	0.22	0.56	0.17	0.38	0.39
s, saturation flow rate [veh/h]	1781	1754	1781	1759	1781	3560	1589	1781	1870	1776
c, Capacity [veh/h]	386	380	232	229	133	1085	485	339	786	746
d1, Uniform Delay [s]	47.03	47.03	52.22	52.22	55.55	37.33	41.73	47.52	32.62	33.24
k, delay calibration	0.50	0.48	0.17	0.36	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	363.83	110.94	121.40	354.73	50.25	4.34	380.85	8.74	16.16	20.36
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.79	1.20	1.24	1.76	1.05	0.73	1.83	0.90	0.91	0.93
d, Delay for Lane Group [s/veh]	410.86	157.97	173.62	406.95	105.80	41.67	422.59	56.26	48.78	53.60
Lane Group LOS	F	F	F	F	F	D	F	E	D	D
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	50.11	22.65	14.60	29.26	5.76	10.55	64.78	9.37	21.45	22.09
50th-Percentile Queue Length [ft/ln]	1252.66	566.21	364.89	731.45	143.88	263.70	1619.50	234.14	536.25	552.20
95th-Percentile Queue Length [veh/ln]	77.91	33.47	22.79	46.01	9.85	15.87	101.91	14.38	29.05	29.80
95th-Percentile Queue Length [ft/ln]	1947.64	836.69	569.87	1150.36	246.23	396.85	2547.67	359.62	726.13	744.89

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	410.86	157.97	157.97	173.62	406.95	406.95	105.80	41.67	422.59	56.26	50.74	53.60
Movement LOS	F	F	F	F	F	F	F	D	F	E	D	D
d_A, Approach Delay [s/veh]	310.28			309.70			232.14			52.07		
Approach LOS	F			F			F			D		
d_I, Intersection Delay [s/veh]	201.25											
Intersection LOS	F											
Intersection V/C	1.345											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	0.00
I_p,int, Pedestrian LOS Score for Intersection	3.220	2.601	3.512	0.000
Crosswalk LOS	C	B	D	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	433	262	905	838
d_b, Bicycle Delay [s]	36.82	45.33	17.99	20.24
I_b,int, Bicycle LOS Score for Intersection	3.447	2.700	3.060	2.974
Bicycle LOS	C	B	C	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 17: Matthews Rd @ Palomar Rd

Control Type:	Two-way stop	Delay (sec / veh):	83.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.585

Intersection Setup

Name	Palomar Rd		Matthews Rd		Matthews Rd	
Approach	Southbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	0	0
Entry Pocket Length [ft]	100.00	200.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Palomar Rd		Matthews Rd		Matthews Rd	
Base Volume Input [veh/h]	51	173	202	128	274	150
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	112	73	0	53	88
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	56	303	296	141	355	253
Peak Hour Factor	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	78	76	36	91	65
Total Analysis Volume [veh/h]	58	312	305	145	366	261
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.59	0.47	0.00	0.00	0.33	0.00
d_M, Delay for Movement [s/veh]	83.25	14.99	0.00	0.00	9.83	0.00
Movement LOS	F	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	2.76	2.48	0.00	0.00	1.45	1.45
95th-Percentile Queue Length [ft/ln]	68.92	62.07	0.00	0.00	36.31	36.31
d_A, Approach Delay [s/veh]	25.69		0.00		5.74	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	9.05					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 18: McLaughlin Rd @ Murrieta Rd

Control Type:	Two-way stop	Delay (sec / veh):	16.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.047

Intersection Setup

Name	Murrieta Rd			Murrieta Rd			McLaughlin Rd			McLaughlin Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔			↔			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	55.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Murrieta Rd			Murrieta Rd			McLaughlin Rd			McLaughlin Rd		
Base Volume Input [veh/h]	2	227	0	7	171	2	4	0	1	3	0	10
Base Volume Adjustment Factor	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	74	0	0	34	2	9	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	392	0	10	274	5	14	0	1	4	0	14
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	103	0	3	72	1	4	0	0	1	0	4
Total Analysis Volume [veh/h]	3	413	0	11	288	5	15	0	1	4	0	15
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.01	0.00	0.00	0.05	0.00	0.00	0.01	0.00	0.02
d_M, Delay for Movement [s/veh]	7.84	0.00	0.00	8.17	0.00	0.00	16.71	16.00	10.35	16.05	15.74	10.88
Movement LOS	A	A	A	A	A	A	C	C	B	C	C	B
95th-Percentile Queue Length [veh/ln]	0.01	0.00	0.00	0.03	0.00	0.00	0.15	0.15	0.15	0.11	0.11	0.11
95th-Percentile Queue Length [ft/ln]	0.18	0.00	0.00	0.73	0.00	0.00	3.76	3.76	3.76	2.75	2.75	2.75
d_A, Approach Delay [s/veh]	0.06			0.30			16.31			11.97		
Approach LOS	A			A			C			B		
d_I, Intersection Delay [s/veh]	0.80											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 19: McLaughlin Rd @ Encanto Dr

Control Type:	Two-way stop	Delay (sec / veh):	14.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.101

Intersection Setup

Name	Encanto Dr		Encanto Dr		McLaughlin Rd	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00		50.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Encanto Dr		Encanto Dr		McLaughlin Rd	
Base Volume Input [veh/h]	174	10	36	181	15	28
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	85	0	4	19	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	192	96	39	203	36	31
Peak Hour Factor	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	58	29	12	61	11	9
Total Analysis Volume [veh/h]	231	116	47	245	43	37
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.04	0.00	0.10	0.05
d_M, Delay for Movement [s/veh]	0.00	0.00	8.09	0.00	14.63	10.99
Movement LOS	A	A	A	A	B	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.12	0.12	0.52	0.52
95th-Percentile Queue Length [ft/ln]	0.00	0.00	3.02	3.02	13.12	13.12
d_A, Approach Delay [s/veh]	0.00		1.30		12.94	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	1.97					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 20: McLaughlin Rd @ Trumble Rd

Control Type:	All-way stop	Delay (sec / veh):	7.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.175

Intersection Setup

Name	Trumble Rd			Trumble Rd			McLaughlin Rd			McLaughlin Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Trumble Rd			Trumble Rd			McLaughlin Rd			McLaughlin Rd		
Base Volume Input [veh/h]	37	1	0	0	3	4	4	0	16	0	0	0
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	4	18	67	0	0	15	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	40	1	0	0	3	8	22	67	18	0	15	0
Peak Hour Factor	0.6900	0.6900	0.6900	0.6900	0.6900	0.6900	0.6900	0.6900	0.6900	0.6900	0.6900	0.6900
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	0	0	0	1	3	8	24	7	0	5	0
Total Analysis Volume [veh/h]	58	1	0	0	4	12	32	97	26	0	22	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	795	916	884	846
Degree of Utilization, x	0.07	0.02	0.18	0.03

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.24	0.05	0.63	0.08
95th-Percentile Queue Length [ft]	6.00	1.33	15.83	2.00
Approach Delay [s/veh]	7.89	7.00	7.93	7.37
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	7.81			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 21: McLaughlin Rd @ Sherman Rd

Control Type:	Two-way stop	Delay (sec / veh):	10.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.286

Intersection Setup

Name	Sherman Rd			Sherman Rd			McLaughlin Rd			Dawson Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Sherman Rd			Sherman Rd			McLaughlin Rd			Dawson Rd		
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	1	0	0	0
Base Volume Adjustment Factor	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	7	0	0	0	15	67	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	7	0	0	0	15	67	0	1	0	0	0
Peak Hour Factor	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	7	0	0	0	15	67	0	1	0	0	0
Total Analysis Volume [veh/h]	0	28	0	0	0	60	268	0	4	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.33	0.00	0.00	7.27	0.00	0.00	10.39	10.87	10.00	8.86	9.49	8.44
Movement LOS	A	A	A	A	A	A	B	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	1.20	1.20	1.20	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	30.11	30.11	30.11	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00			0.00			10.38			8.93		
Approach LOS	A			A			B			A		
d_I, Intersection Delay [s/veh]	7.84											
Intersection LOS	B											

**Intersection Level Of Service Report
Intersection 22: Rouse Rd @ Murrieta Rd**

Control Type:	Two-way stop	Delay (sec / veh):	17.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.076

Intersection Setup

Name	Murrieta Rd			Murrieta Rd			Rouse Rd			Rouse Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	150.00	100.00	100.00	100.00	100.00	100.00	151.00	100.00	250.00	150.00	100.00	150.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Murrieta Rd			Murrieta Rd			Rouse Rd			Rouse Rd		
Base Volume Input [veh/h]	3	188	8	26	165	1	9	8	6	11	2	35
Base Volume Adjustment Factor	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	46	0	4	27	2	9	0	0	0	0	18
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	309	12	40	258	3	22	12	8	16	3	67
Peak Hour Factor	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	80	3	10	66	1	6	3	2	4	1	17
Total Analysis Volume [veh/h]	4	319	12	41	266	3	23	12	8	16	3	69
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.03	0.00	0.00	0.08	0.03	0.01	0.05	0.01	0.10
d_M, Delay for Movement [s/veh]	7.79	0.00	0.00	8.03	0.00	0.00	17.94	15.46	9.71	16.08	15.07	10.52
Movement LOS	A	A	A	A	A	A	C	C	A	C	C	B
95th-Percentile Queue Length [veh/ln]	0.01	0.00	0.00	0.10	0.00	0.00	0.25	0.10	0.03	0.15	0.03	0.32
95th-Percentile Queue Length [ft/ln]	0.23	0.00	0.00	2.59	0.00	0.00	6.16	2.61	0.78	3.68	0.63	7.90
d_A, Approach Delay [s/veh]	0.09			1.06			15.72			11.68		
Approach LOS	A			A			C			B		
d_I, Intersection Delay [s/veh]	2.66											
Intersection LOS	C											

**Intersection Level Of Service Report
Intersection 23: Rouse Rd @ Encanto Dr**

Control Type:	Two-way stop	Delay (sec / veh):	18.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.308

Intersection Setup

Name	Encanto Dr		Encanto Dr		Rouse Rd	
Approach	Northbound		Southbound		Westbound	
Lane Configuration	↬		↵		↵	
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00		50.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Encanto Dr		Encanto Dr		Rouse Rd	
Base Volume Input [veh/h]	170	57	13	149	85	32
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	85	4	4	19	7	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	273	67	19	183	100	35
Peak Hour Factor	0.7900	0.7900	0.7900	0.7900	0.7900	0.7900
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	86	21	6	58	32	11
Total Analysis Volume [veh/h]	346	85	24	232	127	44
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.02	0.00	0.31	0.07
d_M, Delay for Movement [s/veh]	0.00	0.00	8.26	0.00	18.36	15.10
Movement LOS	A	A	A	A	C	C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.07	0.07	1.71	1.71
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.63	1.63	42.83	42.83
d_A, Approach Delay [s/veh]	0.00		0.77		17.52	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	3.72					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 24: McCall Blvd @ Bradley Rd

Control Type:	Signalized	Delay (sec / veh):	23.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.862

Intersection Setup

Name	Bradley Rd			Bradley Rd			McCall Blvd			McCall Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	90.00	100.00	100.00	365.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Bradley Rd			Bradley Rd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	29	35	226	102	46	8	17	277	29	367	293	36
Base Volume Adjustment Factor	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	17	0	0	0	0	59	0	4	75	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	40	49	333	143	65	12	23	447	40	517	485	51
Peak Hour Factor	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	14	95	41	18	3	7	127	11	147	138	14
Total Analysis Volume [veh/h]	45	56	378	163	74	14	26	508	45	588	551	58
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Overlap	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	6	0	5	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	5	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	30	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.2	3.2	0.0	3.0	0.0	3.0	3.6	0.0	3.0	3.6	0.0
All red [s]	0.0	1.0	1.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	38	38	0	9	0	9	33	0	10	34	0
Vehicle Extension [s]	0.0	3.0	3.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	5	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	26	26	0	0	0	0	23	0	0	22	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	2.2	0.0	2.0	0.0	2.0	2.6	0.0	2.0	2.6	0.0
Minimum Recall		No	No		No		No	No		No	No	
Maximum Recall		No	No		No		No	No		No	No	
Pedestrian Recall		No	No		No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	L	C	C	L	C	C
C, Cycle Length [s]	71	71	71	71	71	71	71	71	71	71	71
L, Total Lost Time per Cycle [s]	4.20	4.20	4.00	4.00	4.00	4.00	4.60	4.60	4.00	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20	0.00	2.00	2.00	2.00	2.60	2.60	2.00	2.60	2.60
g_i, Effective Green Time [s]	6	6	36	9	9	2	13	13	26	37	37
g / C, Green / Cycle	0.08	0.08	0.51	0.12	0.12	0.03	0.19	0.19	0.37	0.53	0.53
(v / s)_i Volume / Saturation Flow Rate	0.03	0.03	0.24	0.09	0.05	0.01	0.15	0.15	0.33	0.17	0.17
s, saturation flow rate [veh/h]	1781	1870	1589	1781	1819	1781	1870	1817	1781	1870	1808
c, Capacity [veh/h]	150	158	810	220	225	51	354	344	651	985	952
d1, Uniform Delay [s]	30.49	30.63	11.20	29.97	28.61	33.96	27.40	27.43	21.30	9.52	9.53
k, delay calibration	0.11	0.11	0.13	0.11	0.11	0.11	0.11	0.11	0.29	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.10	1.35	0.49	4.83	1.11	7.83	3.98	4.18	11.74	0.18	0.19
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.30	0.35	0.47	0.74	0.39	0.51	0.79	0.79	0.90	0.31	0.31
d, Delay for Lane Group [s/veh]	31.59	31.98	11.69	34.80	29.72	41.79	31.38	31.60	33.04	9.71	9.72
Lane Group LOS	C	C	B	C	C	D	C	C	C	A	A
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.74	0.93	3.47	2.87	1.40	0.53	4.61	4.53	10.35	2.35	2.28
50th-Percentile Queue Length [ft/ln]	18.60	23.30	86.64	71.75	34.90	13.30	115.36	113.13	258.64	58.74	56.96
95th-Percentile Queue Length [veh/ln]	1.34	1.68	6.24	5.17	2.51	0.96	8.14	8.01	15.62	4.23	4.10
95th-Percentile Queue Length [ft/ln]	33.48	41.93	155.95	129.15	62.82	23.94	203.43	200.35	390.51	105.72	102.52

Movement, Approach, & Intersection Results

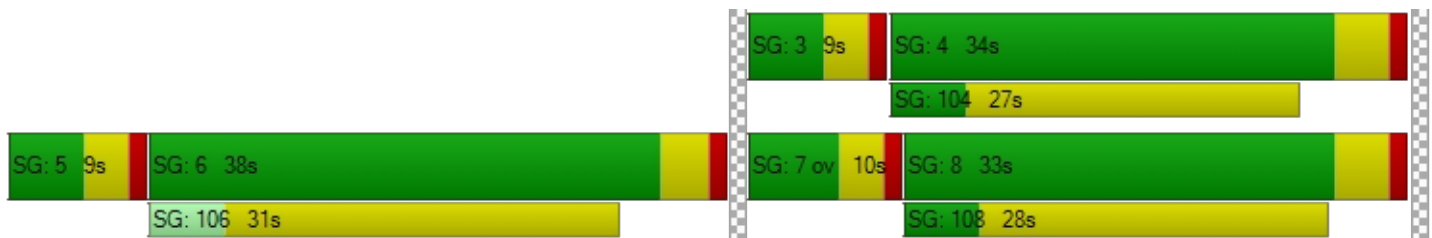
d_M, Delay for Movement [s/veh]	31.59	31.98	11.69	34.80	29.72	29.72	41.79	31.48	31.60	33.04	9.71	9.72
Movement LOS	C	C	B	C	C	C	D	C	C	C	A	A
d_A, Approach Delay [s/veh]	15.93			33.02			31.95			21.17		
Approach LOS	B			C			C			C		
d_I, Intersection Delay [s/veh]	23.85											
Intersection LOS	C											
Intersection V/C	0.862											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	5.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	40.14	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.422	2.069	2.576	0.000
Crosswalk LOS	B	B	B	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	751	111	631	653
d_b, Bicycle Delay [s]	17.55	40.14	21.08	20.40
I_b,int, Bicycle LOS Score for Intersection	2.350	1.974	2.037	2.547
Bicycle LOS	B	A	B	B

Sequence




Ring 1	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 25: McCall Blvd @ I-215 SB

Control Type:	Signalized	Delay (sec / veh):	35.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.884

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	455.00	100.00	100.00	400.00	235.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name				I-215 SB			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	0	0	0	225	0	264	0	667	311	437	898	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0600	1.0600	1.0600	1.0000	1.0600	1.0600	1.0600	1.0600	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	69	0	0	0	76	0	144	79	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	317	0	292	0	812	342	625	1069	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9500	0.9500	0.9500	1.0000	0.9500	0.9500	0.9500	0.9500	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	83	0	77	0	214	90	164	281	0
Total Analysis Volume [veh/h]	0	0	0	334	0	307	0	855	360	658	1125	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing in		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	5	0	0	5	0	5	5	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	3.2	0.0	0.0	3.6	0.0	3.0	3.6	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	39	0	0	41	0	40	81	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	24	0	0	21	0	0	15	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	2.2	0.0	0.0	2.6	0.0	2.0	2.6	0.0
Minimum Recall					No			No		No	No	
Maximum Recall					No			No		No	No	
Pedestrian Recall					No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		C	R	C	R	L	C
C, Cycle Length [s]		87	87	87	87	87	87
L, Total Lost Time per Cycle [s]		4.20	4.20	4.60	4.60	4.00	4.60
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		2.20	2.20	2.60	2.60	2.00	2.60
g_i, Effective Green Time [s]		20	20	24	24	30	58
g / C, Green / Cycle		0.23	0.23	0.28	0.28	0.35	0.67
(v / s)_i Volume / Saturation Flow Rate		0.19	0.19	0.24	0.23	0.37	0.32
s, saturation flow rate [veh/h]		1781	1589	3560	1589	1781	3560
c, Capacity [veh/h]		404	360	1001	447	614	2393
d1, Uniform Delay [s]		32.01	32.23	29.57	29.05	28.50	6.84
k, delay calibration		0.11	0.13	0.11	0.19	0.50	0.11
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		4.57	6.55	2.19	5.92	56.93	0.14
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.83	0.85	0.85	0.81	1.07	0.47
d, Delay for Lane Group [s/veh]		36.58	38.78	31.76	34.97	85.43	6.98
Lane Group LOS		D	D	C	C	F	A
Critical Lane Group		No	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		7.00	6.66	8.31	7.36	21.59	3.99
50th-Percentile Queue Length [ft/ln]		174.95	166.46	207.82	183.99	539.81	99.65
95th-Percentile Queue Length [veh/ln]		11.34	10.89	13.04	11.81	30.58	7.17
95th-Percentile Queue Length [ft/ln]		283.41	272.25	326.03	295.21	764.48	179.37

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	36.58	36.58	38.78	0.00	31.76	34.97	85.43	6.98	0.00
Movement LOS				D	D	D		C	C	F	A	
d_A, Approach Delay [s/veh]	0.00			37.63			32.71			35.93		
Approach LOS	A			D			C			D		
d_I, Intersection Delay [s/veh]	35.16											
Intersection LOS	D											
Intersection V/C	0.884											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.431	0.000	0.000	0.000
Crosswalk LOS	B	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	580	607	1273
d_b, Bicycle Delay [s]	60.00	30.25	29.12	7.92
I_b,int, Bicycle LOS Score for Intersection	4.132	2.617	2.562	3.031
Bicycle LOS	D	B	B	C

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 26: McCall Blvd @ I-215 NB

Control Type:	Signalized	Delay (sec / veh):	47.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.966

Intersection Setup

Name	I-215 NB						McCall Blvd			McCall Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	240.00	100.00	100.00	100.00	250.00	100.00	100.00	100.00	100.00	320.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name	I-215 NB						McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	298	1	253	0	0	0	256	643	0	0	1032	393
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0000	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0000	1.0000	1.0000	1.0600	1.0600	1.0000	1.0000	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	73	0	0	0	0	145	0	0	223	137
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	329	1	352	0	0	0	282	854	0	0	1360	571
Peak Hour Factor	0.9100	0.9100	0.9100	1.0000	1.0000	1.0000	0.9100	0.9100	1.0000	1.0000	0.9100	0.9100
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	90	0	97	0	0	0	77	235	0	0	374	157
Total Analysis Volume [veh/h]	362	1	387	0	0	0	310	938	0	0	1495	627
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	0	0	5	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	0	0	0	5	5	0	0	5	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	3.2	0.0	0.0	0.0	0.0	3.0	3.6	0.0	0.0	3.6	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	18	0	0	0	0	14	42	0	0	28	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	3	0	0	0	0	0	17	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	0.0	0.0	2.0	2.6	0.0	0.0	2.6	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R		L	C	C	R
C, Cycle Length [s]	60	60		60	60	60	60
L, Total Lost Time per Cycle [s]	4.20	4.20		4.00	4.60	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20		2.00	2.60	2.60	2.60
g_i, Effective Green Time [s]	14	14		10	38	23	23
g / C, Green / Cycle	0.23	0.23		0.17	0.62	0.39	0.39
(v / s)_i Volume / Saturation Flow Rate	0.20	0.24		0.17	0.26	0.42	0.39
s, saturation flow rate [veh/h]	1781	1589		1781	3560	3560	1589
c, Capacity [veh/h]	411	367		300	2219	1384	618
d1, Uniform Delay [s]	22.42	23.20		25.09	5.81	18.44	18.44
k, delay calibration	0.11	0.11		0.11	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.36	37.93		33.40	0.59	49.02	39.97
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.88	1.05		1.03	0.42	1.08	1.01
d, Delay for Lane Group [s/veh]	28.78	61.14		58.49	6.40	67.46	58.41
Lane Group LOS	C	F		F	A	F	F
Critical Lane Group	No	Yes		Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	5.28	8.63		6.68	2.21	17.45	14.03
50th-Percentile Queue Length [ft/ln]	131.90	215.63		166.89	55.26	436.33	350.77
95th-Percentile Queue Length [veh/ln]	9.04	13.81		11.08	3.98	25.59	20.38
95th-Percentile Queue Length [ft/ln]	226.08	345.36		276.94	99.47	639.64	509.43

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	28.78	28.78	61.14	0.00	0.00	0.00	58.49	6.40	0.00	0.00	67.46	58.41
Movement LOS	C	C	F				F	A			F	F
d_A, Approach Delay [s/veh]	45.48			0.00			19.34			64.79		
Approach LOS	D			A			B			E		
d_I, Intersection Delay [s/veh]	47.51											
Intersection LOS	D											
Intersection V/C	0.966											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.061	0.000	0.000	0.000
Crosswalk LOS	B	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	460	0	1247	780
d_b, Bicycle Delay [s]	17.79	30.00	4.26	11.16
I_b,int, Bicycle LOS Score for Intersection	2.797	4.132	2.589	3.310
Bicycle LOS	C	D	B	C

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 27: McCall Blvd @ Encanto Dr

Control Type:	Signalized	Delay (sec / veh):	49.0
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.944

Intersection Setup

Name	Encanto Dr			Encanto Dr			McCall Blvd			McCall Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	130.00	100.00	130.00	80.00	100.00	100.00	100.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Encanto Dr			Encanto Dr			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	220	22	66	57	18	132	141	662	91	58	1074	57
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	17	0	6	4	16	46	172	0	0	343	25
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	243	41	73	69	24	161	202	901	101	64	1527	88
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	66	11	20	19	7	44	55	245	27	17	415	24
Total Analysis Volume [veh/h]	264	45	79	75	26	175	220	979	110	70	1660	96
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	95
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.2	0.0	0.0	3.2	0.0	3.0	3.6	0.0	3.0	3.6	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	31	0	0	31	0	16	55	0	9	48	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	17	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	2.2	0.0	2.0	2.6	0.0	2.0	2.6	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	L	C	C	L	C	C
C, Cycle Length [s]	95	95	95	95	95	95	95	95	95	95	95
L, Total Lost Time per Cycle [s]	4.20	4.20	4.20	4.20	4.20	4.00	4.60	4.60	4.00	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20	2.20	2.20	2.20	2.00	2.60	2.60	2.00	2.60	2.60
g_i, Effective Green Time [s]	27	27	27	27	27	12	51	51	5	43	43
g / C, Green / Cycle	0.28	0.28	0.28	0.28	0.28	0.13	0.53	0.53	0.05	0.46	0.46
(v / s)_i Volume / Saturation Flow Rate	0.22	0.02	0.05	0.06	0.12	0.12	0.30	0.30	0.04	0.47	0.48
s, saturation flow rate [veh/h]	1181	1870	1589	1361	1621	1781	1870	1805	1781	1870	1835
c, Capacity [veh/h]	265	528	449	408	457	224	994	959	92	855	839
d1, Uniform Delay [s]	42.08	25.09	25.77	28.75	27.96	41.44	14.81	14.84	44.49	25.80	25.80
k, delay calibration	0.23	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	37.09	0.07	0.19	0.21	0.66	23.81	2.25	2.35	12.08	38.43	43.24
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.00	0.09	0.18	0.18	0.44	0.98	0.56	0.56	0.76	1.03	1.04
d, Delay for Lane Group [s/veh]	79.17	25.16	25.96	28.96	28.62	65.24	17.06	17.19	56.58	64.23	69.04
Lane Group LOS	E	C	C	C	C	E	B	B	E	F	F
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	8.94	0.75	1.36	1.38	3.77	6.49	7.88	7.67	1.91	26.80	27.42
50th-Percentile Queue Length [ft/ln]	223.38	18.77	33.97	34.49	94.27	162.32	196.92	191.76	47.68	670.11	685.41
95th-Percentile Queue Length [veh/ln]	13.84	1.35	2.45	2.48	6.79	10.67	12.48	12.21	3.43	36.08	37.22
95th-Percentile Queue Length [ft/ln]	345.94	33.79	61.14	62.07	169.68	266.80	311.99	305.31	85.83	902.12	930.40

Movement, Approach, & Intersection Results

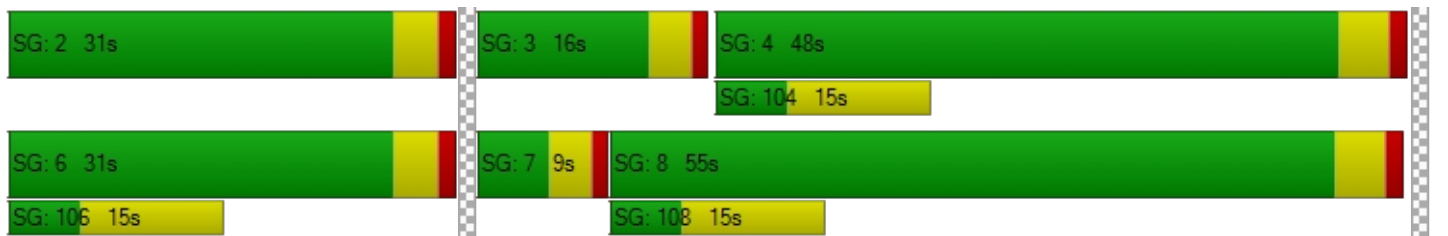
d_M, Delay for Movement [s/veh]	79.17	25.16	25.96	28.96	28.62	28.62	65.24	17.12	17.19	56.58	66.49	69.04
Movement LOS	E	C	C	C	C	C	E	B	B	E	E	E
d_A, Approach Delay [s/veh]	62.07			28.71			25.21			66.24		
Approach LOS	E			C			C			E		
d_I, Intersection Delay [s/veh]	48.95											
Intersection LOS	D											
Intersection V/C	0.944											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	38.93	38.93	0.00	38.93
I_p,int, Pedestrian LOS Score for Intersection	2.280	2.151	0.000	3.084
Crosswalk LOS	B	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	564	564	1061	914
d_b, Bicycle Delay [s]	24.48	24.48	10.47	14.01
I_b,int, Bicycle LOS Score for Intersection	2.200	2.015	2.640	3.066
Bicycle LOS	B	B	B	C

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 28: Sherman Rd @ Project dwy 1

Control Type:	Two-way stop	Delay (sec / veh):	20.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.030

Intersection Setup

Name	Sherman Rd		Sherman Rd		Westbound	
Approach	Northbound		Southbound			
Lane Configuration	↬		↶↵		↵	
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Sherman Rd		Sherman Rd		Westbound	
Base Volume Input [veh/h]	11	0	0	25	0	0
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	99	32	301	337	7	76
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	112	32	301	366	7	76
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	29	8	79	96	2	20
Total Analysis Volume [veh/h]	118	34	317	385	7	80
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			Yes
Number of Storage Spaces in Median	0	0	1

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.22	0.00	0.03	0.09
d_M, Delay for Movement [s/veh]	0.00	0.00	8.24	0.00	20.89	9.58
Movement LOS	A	A	A	A	C	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.85	0.00	0.40	0.40
95th-Percentile Queue Length [ft/ln]	0.00	0.00	21.25	0.00	9.91	9.91
d_A, Approach Delay [s/veh]	0.00		3.72		10.49	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	3.74					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 29: Sherman Rd @ Project dwy 2

Control Type:	Two-way stop	Delay (sec / veh):	12.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.031

Intersection Setup

Name	Sherman Rd		Sherman Rd		Eastbound	
Approach	Northbound		Southbound			
Lane Configuration	↶		↷		↷	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Sherman Rd		Sherman Rd		Eastbound	
Base Volume Input [veh/h]	0	11	25	0	0	0
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	117	316	28	15	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	130	345	28	15	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	34	91	7	4	0
Total Analysis Volume [veh/h]	2	137	363	29	16	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.03	0.00
d_M, Delay for Movement [s/veh]	8.09	0.00	0.00	0.00	12.19	10.60
Movement LOS	A	A	A	A	B	B
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.00	0.00	0.10	0.10
95th-Percentile Queue Length [ft/ln]	0.13	0.13	0.00	0.00	2.39	2.39
d_A, Approach Delay [s/veh]	0.12		0.00		12.19	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	0.39					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 30: Sherman Rd @ Project dwy 3

Control Type:	Two-way stop	Delay (sec / veh):	20.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.008

Intersection Setup

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

Volumes

Name	Sherman Rd			Sherman Rd								
Base Volume Input [veh/h]	0	11	0	0	25	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	41	32	301	8	8	2	0	0	7	0	76
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	54	32	301	37	8	2	0	0	7	0	76
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	14	8	79	10	2	1	0	0	2	0	20
Total Analysis Volume [veh/h]	1	57	34	317	39	8	2	0	0	7	0	80
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.21	0.00	0.00	0.01	0.00	0.00	0.03	0.00	0.08
d_M, Delay for Movement [s/veh]	7.31	0.00	0.00	8.03	0.00	0.00	20.40	18.92	8.63	18.71	19.07	9.17
Movement LOS	A	A	A	A	A	A	C	C	A	C	C	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.80	0.00	0.00	0.03	0.03	0.03	0.36	0.36	0.36
95th-Percentile Queue Length [ft/ln]	0.05	0.05	0.05	19.92	0.00	0.00	0.64	0.64	0.64	8.92	8.92	8.92
d_A, Approach Delay [s/veh]	0.08			6.99			20.40			9.94		
Approach LOS	A			A			C			A		
d_I, Intersection Delay [s/veh]	6.35											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 31: Trumble Rd @ Project dwy 4

Control Type:	Two-way stop	Delay (sec / veh):	8.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Trumble Rd		Trumble Rd		Project dwy	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Trumble Rd		Trumble Rd		Project dwy	
Base Volume Input [veh/h]	5	0	0	7	0	0
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	9	0	0	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	9	0	7	2	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	2	0	2	1	0
Total Analysis Volume [veh/h]	5	9	0	7	2	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.24	0.00	8.60	8.37
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.15	0.15
d_A, Approach Delay [s/veh]	0.00		0.00		8.60	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.75					
Intersection LOS	A					

**Intersection Level Of Service Report
Intersection 32: Trumble Rd @ Project dwy 5**

Control Type:	Two-way stop	Delay (sec / veh):	8.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Trumble Rd		Trumble Rd		Project dwy	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Trumble Rd		Trumble Rd		Project dwy	
Base Volume Input [veh/h]	5	0	0	7	0	0
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	9	9	0	2	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	14	9	0	9	2	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	2	0	2	1	0
Total Analysis Volume [veh/h]	15	9	0	9	2	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.26	0.00	8.66	8.41
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.15	0.15
d_A, Approach Delay [s/veh]	0.00		0.00		8.66	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.49					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 33: Dawson Rd @ Project dwy 6

Control Type:	Two-way stop	Delay (sec / veh):	9.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.043

Intersection Setup

Name	Dawson Rd		Dawson Rd		Eastbound	
Approach	Northbound		Southbound			
Lane Configuration	↰		↳		↻	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Dawson Rd		Dawson Rd		Eastbound	
Base Volume Input [veh/h]	0	2	4	0	0	0
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	31	104	138	31	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	33	108	138	31	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	9	28	36	8	0
Total Analysis Volume [veh/h]	0	35	114	145	33	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.04	0.00
d_M, Delay for Movement [s/veh]	7.76	0.00	0.00	0.00	9.91	9.42
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.13	0.13
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	3.37	3.37
d_A, Approach Delay [s/veh]	0.00		0.00		9.91	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 34: Dawson Rd @ Project dwy 7

Control Type:	Two-way stop	Delay (sec / veh):	8.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.035

Intersection Setup

Name	Dawson Rd		Dawson Rd		Eastbound	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration	↶		↷		↷	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Dawson Rd		Dawson Rd		Eastbound	
Base Volume Input [veh/h]	0	2	4	0	0	0
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	104	31	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	2	4	104	31	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	1	27	8	0
Total Analysis Volume [veh/h]	0	2	4	109	33	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.03	0.00
d_M, Delay for Movement [s/veh]	7.44	0.00	0.00	0.00	8.94	8.71
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.11	0.11
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	2.71	2.71
d_A, Approach Delay [s/veh]	0.00		0.00		8.94	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.99					
Intersection LOS	A					

Menifee Commerce Center

Vistro File: H:\...\19-239 Menifee Commerce Center
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Scenario 6 Opening Day + CP PM (2024)

Report File: H:\...\LOS - 3 Opening Day + CP PM.pdf

2021-08-12

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Case Rd/Bonnie Dr @ I-215 SB	Signalized	HCM 6th Edition	SB Thru	0.919	40.9	D
2	SR-74 @ I-215 NB	Signalized	HCM 6th Edition	SEB Left	0.510	10.1	B
3	SR-74 @ Trumble Rd	Signalized	HCM 6th Edition	SEB Left	0.936	47.9	D
4	SR-74 @ Sherman Rd	Signalized	HCM 6th Edition	SEB Left	0.756	22.8	C
5	Ethanac Rd @ Murrieta Rd	Signalized	HCM 6th Edition	EB Left	0.797	35.6	D
6	Ethanac Rd @ Case Rd/Barnett Rd	Signalized	HCM 6th Edition	WB Right	0.792	30.6	C
7	Ethanac Rd @ I-215 SB	Signalized	HCM 6th Edition	EB Thru	1.068	87.5	F
8	Ethanac Rd @ I-215 NB	Signalized	HCM 6th Edition	WB Thru	1.569	295.9	F
9	Ethanac Rd @ Encanto Dr	Two-way stop	HCM 6th Edition	NB Left	8.783	4,113.8	F
10	Ethanac Rd @ Trumble Rd	Signalized	HCM 6th Edition	WB Left	1.021	52.6	D
11	Ethanac Rd @ Sherman Rd	Two-way stop	HCM 6th Edition	NB Thru	4.235	10,000.0	F
12	Ethanac Rd @ Dawson Rd	Two-way stop	HCM 6th Edition	NB Left	1.876	519.2	F
13	Ethanac Rd @ Antelope Rd	Two-way stop	HCM 6th Edition	NB Left	0.295	41.7	E
14	SR-74 @ Palomar Rd	Signalized	HCM 6th Edition	EB Left	0.799	20.6	C
15	SR-74 @ Menifee Rd	Signalized	HCM 6th Edition	NB Right	1.290	195.6	F
16	SR-74 @ Briggs Rd	Signalized	HCM 6th Edition	WB Left	0.722	37.4	D
17	Matthews Rd @ Palomar Rd	Two-way stop	HCM 6th Edition	SB Left	0.417	62.8	F
	McLaughlin Rd @ Murrieta		HCM 6th				

18	McLaughlin Rd @ Murrieta Rd	Two-way stop	HCM 6th Edition	EB Left	0.082	31.7	D
19	McLaughlin Rd @ Encanto Dr	Two-way stop	HCM 6th Edition	WB Left	0.184	12.9	B
20	McLaughlin Rd @ Trumble Rd	All-way stop	HCM 6th Edition	NB Left	0.108	7.5	A
21	McLaughlin Rd @ Sherman Rd	Two-way stop	HCM 6th Edition	EB Thru	0.003	10.3	B
22	Rouse Rd @ Murrieta Rd	Two-way stop	HCM 6th Edition	EB Left	0.165	35.9	E
23	Rouse Rd @ Encanto Dr	Two-way stop	HCM 6th Edition	WB Left	0.096	13.2	B
24	McCall Blvd @ Bradley Rd	Signalized	HCM 6th Edition	WB Left	1.094	72.6	E
25	McCall Blvd @ I-215 SB	Signalized	HCM 6th Edition	SB Right	1.025	66.7	E
26	McCall Blvd @ I-215 NB	Signalized	HCM 6th Edition	NB Right	0.975	46.4	D
27	McCall Blvd @ Encanto Dr	Signalized	HCM 6th Edition	EB Right	0.825	49.3	D
28	Sherman Rd @ Project dwy 1	Two-way stop	HCM 6th Edition	WB Left	0.111	26.5	D
29	Sherman Rd @ Project dwy 2	Two-way stop	HCM 6th Edition	EB Left	0.075	14.4	B
30	Sherman Rd @ Project dwy 3	Two-way stop	HCM 6th Edition	EB Left	0.044	23.1	C
31	Trumble Rd @ Project dwy 4	Two-way stop	HCM 6th Edition	WB Left	0.011	8.7	A
32	Trumble Rd @ Project dwy 5	Two-way stop	HCM 6th Edition	WB Left	0.011	8.8	A
33	Dawson Rd @ Project dwy 6	Two-way stop	HCM 6th Edition	EB Left	0.201	11.0	B
34	Dawson Rd @ Project dwy 7	Two-way stop	HCM 6th Edition	EB Left	0.115	9.2	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Case Rd/Bonnie Dr @ I-215 SB

Control Type:	Signalized	Delay (sec / veh):	40.9
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.919

Intersection Setup

Name	Case Rd		I-215 SB		Bonnie Dr	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration	↵		↳		↵↵	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1
Entry Pocket Length [ft]	115.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Case Rd		I-215 SB		Bonnie Dr	
Base Volume Input [veh/h]	238	336	899	26	25	317
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	65	7	3	12	14	32
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	328	377	994	41	42	382
Peak Hour Factor	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	88	101	267	11	11	103
Total Analysis Volume [veh/h]	353	405	1069	44	45	411
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing in	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	75
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Overlap	Split	Overlap
Signal Group	1	6	2	2	3	3
Auxiliary Signal Groups				1,2,3,6		1,2,3,6
Lead / Lag	Lag	-	-	-	Lead	-
Minimum Green [s]	5	5	5	5	5	5
Maximum Green [s]	30	30	30	30	30	30
Amber [s]	3.0	4.3	4.3	4.3	4.3	4.3
All red [s]	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	19	56	37	37	19	19
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	5	5	5	5	5
Pedestrian Clearance [s]	0	17	7	7	10	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	3.3	3.3	3.3	3.3	3.3
Minimum Recall	No	No	No	No	No	No
Maximum Recall	No	No	No	No	No	No
Pedestrian Recall	No	No	No	No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	R
C, Cycle Length [s]	75	75	75	75	75	75
L, Total Lost Time per Cycle [s]	4.00	5.30	5.30	5.30	5.30	5.30
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	3.30	3.30	0.00	3.30	0.00
g_i, Effective Green Time [s]	15	59	40	106	5	106
g / C, Green / Cycle	0.20	0.79	0.54	1.41	0.07	1.41
(v / s)_i Volume / Saturation Flow Rate	0.25	0.22	0.57	0.03	0.03	0.26
s, saturation flow rate [veh/h]	1417	1870	1870	1589	1781	1589
c, Capacity [veh/h]	348	1478	1003	2246	122	2246
d1, Uniform Delay [s]	32.75	2.11	17.44	0.00	33.48	0.00
k, delay calibration	0.18	0.50	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	31.92	0.46	47.61	0.02	1.85	0.18
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	0.71	1.00	0.71
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.01	0.27	1.07	0.02	0.37	0.18
d, Delay for Lane Group [s/veh]	64.68	2.56	65.05	0.02	35.33	0.18
Lane Group LOS	F	A	F	A	D	A
Critical Lane Group	Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	9.11	0.60	26.43	0.01	0.80	0.11
50th-Percentile Queue Length [ft/ln]	227.86	14.92	660.82	0.25	19.91	2.80
95th-Percentile Queue Length [veh/ln]	14.16	1.07	36.65	0.02	1.43	0.20
95th-Percentile Queue Length [ft/ln]	354.05	26.85	916.37	0.45	35.83	5.04

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	64.68	2.56	65.05	0.02	35.33	0.18
Movement LOS	F	A	F	A	D	A
d_A, Approach Delay [s/veh]	31.49		62.48		3.65	
Approach LOS	C		E		A	
d_I, Intersection Delay [s/veh]	40.85					
Intersection LOS	D					
Intersection V/C	0.919					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	29.04	29.04	29.04
I_p,int, Pedestrian LOS Score for Intersection	2.942	2.695	2.851
Crosswalk LOS	C	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1352	845	365
d_b, Bicycle Delay [s]	3.94	12.50	25.05
I_b,int, Bicycle LOS Score for Intersection	2.810	3.396	1.560
Bicycle LOS	C	C	A

Sequence




Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: SR-74 @ I-215 NB

Control Type:	Signalized	Delay (sec / veh):	10.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.510

Intersection Setup

Name	I-215 NB		SR-74		Case Rd	
Approach	Southbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	150.00	245.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	I-215 NB		SR-74		Case Rd	
Base Volume Input [veh/h]	272	32	509	791	8	1186
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	24	48	7	7	27
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	303	59	609	879	15	1334
Peak Hour Factor	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	81	16	162	234	4	355
Total Analysis Volume [veh/h]	322	63	648	935	16	1419
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing in	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Permissive	Overlap	Protected	Permissive
Signal Group	7	0	6	6	5	2
Auxiliary Signal Groups				2,5,6,7		
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	5	5	5	5
Maximum Green [s]	30	0	30	30	30	30
Amber [s]	4.3	0.0	4.3	4.3	3.0	4.3
All red [s]	1.0	0.0	1.0	1.0	1.0	1.0
Split [s]	12	0	19	19	29	48
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	3.0
Walk [s]	0	0	5	5	0	5
Pedestrian Clearance [s]	0	0	10	10	0	14
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	3.3	0.0	3.3	3.3	2.0	3.3
Minimum Recall	No		No	No	No	No
Maximum Recall	No		No	No	No	No
Pedestrian Recall	No		No	No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C
C, Cycle Length [s]	55	55	55	55	55
L, Total Lost Time per Cycle [s]	5.30	5.30	4.87	4.00	5.30
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	3.30	3.30	0.00	2.00	3.30
g_i, Effective Green Time [s]	17	21	70	2	27
g / C, Green / Cycle	0.31	0.39	1.27	0.03	0.49
(v / s)_i Volume / Saturation Flow Rate	0.22	0.18	0.59	0.01	0.40
s, saturation flow rate [veh/h]	1747	3560	1589	1417	3560
c, Capacity [veh/h]	546	1394	2021	133	1759
d1, Uniform Delay [s]	16.63	12.43	0.00	27.45	11.68
k, delay calibration	0.11	0.11	0.48	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.68	0.24	0.73	0.40	0.91
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	0.83	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.70	0.46	0.46	0.12	0.81
d, Delay for Lane Group [s/veh]	18.30	12.67	0.73	27.86	12.60
Lane Group LOS	B	B	A	C	B
Critical Lane Group	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.66	2.30	0.41	0.20	5.10
50th-Percentile Queue Length [ft/ln]	91.51	57.52	10.23	5.08	127.49
95th-Percentile Queue Length [veh/ln]	6.59	4.14	0.74	0.37	8.80
95th-Percentile Queue Length [ft/ln]	164.71	103.53	18.41	9.14	220.08

Movement, Approach, & Intersection Results

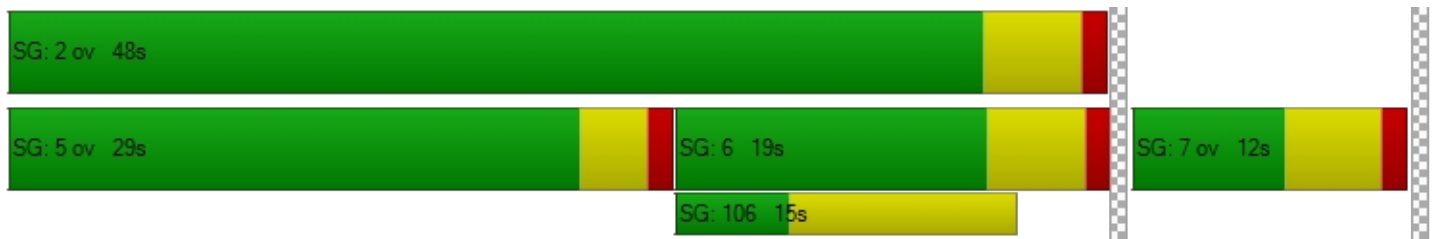
d_M, Delay for Movement [s/veh]	18.30	18.30	12.67	0.73	27.86	12.60
Movement LOS	B	B	B	A	C	B
d_A, Approach Delay [s/veh]	18.30		5.62		12.77	
Approach LOS	B		A		B	
d_I, Intersection Delay [s/veh]	10.07					
Intersection LOS	B					
Intersection V/C	0.510					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	6.7	6.7
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	23.67	23.67
I_p,int, Pedestrian LOS Score for Intersection	2.695	3.256	2.912
Crosswalk LOS	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	223	457	1423
d_b, Bicycle Delay [s]	23.67	17.86	2.49
I_b,int, Bicycle LOS Score for Intersection	2.195	2.866	2.743
Bicycle LOS	B	C	B

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 3: SR-74 @ Trumble Rd**

Control Type:	Signalized	Delay (sec / veh):	47.9
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.936

Intersection Setup

Name	Trumble		SR-74		SR-74	
Approach	Southwestbound		Northwestbound		Southeastbound	
Lane Configuration	⇐⇐		⇐⇐		⇐⇐⇐	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	255.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		Yes	

Volumes

Name	Trumble		SR-74		SR-74	
Base Volume Input [veh/h]	95	415	924	73	343	1127
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	18	0	55	29	0	30
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	123	458	1074	110	378	1272
Peak Hour Factor	0.9900	0.9900	0.9900	0.9900	0.9900	0.9900
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	31	116	271	28	95	321
Total Analysis Volume [veh/h]	124	463	1085	111	382	1285
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing in	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	75
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Protected	Permissive
Signal Group	7	0	6	0	5	2
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	5	0	5	5
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	4.3	0.0	4.3	0.0	3.0	4.3
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	26	0	29	0	18	49
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	10	0	10	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	3.3	0.0	3.3	0.0	2.0	3.3
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C	L	C
C, Cycle Length [s]	75	75	75	75	75	75
L, Total Lost Time per Cycle [s]	5.30	5.30	5.30	5.30	4.00	5.30
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.30	3.30	3.30	3.30	2.00	3.30
g_i, Effective Green Time [s]	23	23	24	24	14	42
g / C, Green / Cycle	0.30	0.30	0.32	0.32	0.19	0.56
(v / s)_i Volume / Saturation Flow Rate	0.07	0.29	0.32	0.33	0.21	0.36
s, saturation flow rate [veh/h]	1781	1589	1870	1811	1781	3560
c, Capacity [veh/h]	539	481	590	572	334	1982
d1, Uniform Delay [s]	19.67	25.82	25.74	25.74	30.55	11.57
k, delay calibration	0.11	0.23	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.22	20.34	40.32	50.27	72.58	1.66
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.23	0.96	1.01	1.05	1.14	0.65
d, Delay for Lane Group [s/veh]	19.89	46.16	66.07	76.02	103.14	13.23
Lane Group LOS	B	D	F	F	F	B
Critical Lane Group	No	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	1.50	9.89	15.85	16.93	12.26	6.18
50th-Percentile Queue Length [ft/ln]	37.42	247.35	396.28	423.21	306.39	154.49
95th-Percentile Queue Length [veh/ln]	2.69	15.05	22.57	24.37	19.18	10.26
95th-Percentile Queue Length [ft/ln]	67.35	376.31	564.22	609.15	479.44	256.41

Movement, Approach, & Intersection Results

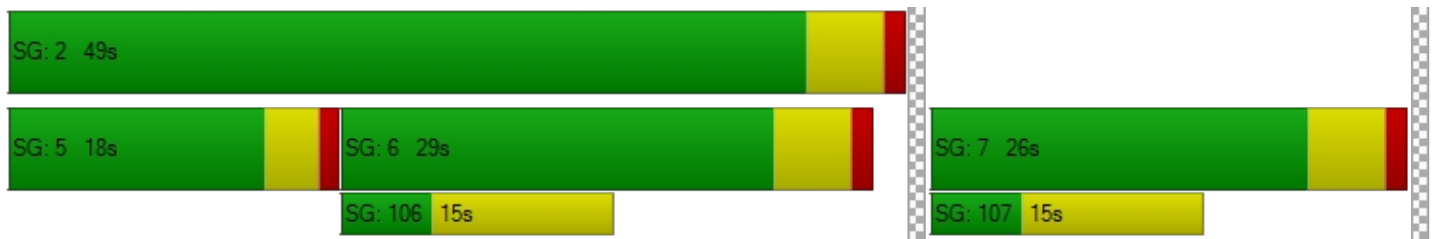
d_M, Delay for Movement [s/veh]	19.89	46.16	70.53	76.02	103.14	13.23
Movement LOS	B	D	E	E	F	B
d_A, Approach Delay [s/veh]	40.61		71.04		33.83	
Approach LOS	D		E		C	
d_I, Intersection Delay [s/veh]	47.88					
Intersection LOS	D					
Intersection V/C	0.936					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	29.04	0.00	29.04
I_p,int, Pedestrian LOS Score for Intersection	2.459	0.000	3.233
Crosswalk LOS	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	552	632	1165
d_b, Bicycle Delay [s]	19.66	17.54	6.53
I_b,int, Bicycle LOS Score for Intersection	1.560	2.546	2.935
Bicycle LOS	A	B	C

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 4: SR-74 @ Sherman Rd**

Control Type:	Signalized	Delay (sec / veh):	22.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.756

Intersection Setup

Name	Sherman Rd			Sherman Rd			SR-74			SR-74		
Approach	Southbound			Northeastbound			Northwestbound			Southeastbound		
Lane Configuration	Y			↶↷			↶↷			↶↷		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	120.00	185.00	100.00	100.00	270.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			40.00			30.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Sherman Rd			Sherman Rd			SR-74			SR-74		
Base Volume Input [veh/h]	23	5	52	27	16	115	87	940	26	16	1182	31
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	0	0	72	0	19	12	12	2	0	7	41
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	29	5	57	102	18	146	107	1049	31	18	1310	75
Peak Hour Factor	0.9500	0.9300	0.9300	0.9300	0.9300	0.9500	0.9500	0.9500	0.9500	0.9300	0.9500	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	1	15	27	5	38	28	276	8	5	345	20
Total Analysis Volume [veh/h]	31	5	61	110	19	154	113	1104	33	19	1379	81
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	2	0	0	1	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.2	0.0	3.0	4.3	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	10	0	0	19	0	10	20	0	11	21	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.2	0.0	2.0	3.3	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	64	64	64	64	64	64	64	64	64
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.20	4.20	4.00	5.30	5.30
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.20	2.20	2.00	3.30	3.30
g_i, Effective Green Time [s]	5	9	9	5	33	33	1	28	28
g / C, Green / Cycle	0.08	0.13	0.13	0.08	0.51	0.51	0.02	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.06	0.07	0.10	0.06	0.31	0.31	0.01	0.39	0.40
s, saturation flow rate [veh/h]	1659	1794	1589	1781	1870	1851	1781	1870	1834
c, Capacity [veh/h]	126	241	214	151	960	950	40	812	796
d1, Uniform Delay [s]	28.96	25.79	26.50	28.59	10.90	10.90	30.84	16.86	16.92
k, delay calibration	0.11	0.11	0.11	0.11	0.19	0.19	0.11	0.31	0.31
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.33	1.84	4.53	7.31	1.05	1.06	8.30	10.50	11.18
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.77	0.54	0.72	0.75	0.60	0.60	0.47	0.91	0.91
d, Delay for Lane Group [s/veh]	38.28	27.63	31.03	35.89	11.95	11.97	39.14	27.36	28.09
Lane Group LOS	D	C	C	D	B	B	D	C	C
Critical Lane Group	Yes	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.74	1.79	2.31	1.91	5.00	4.96	0.36	10.19	10.21
50th-Percentile Queue Length [ft/ln]	43.47	44.74	57.83	47.83	124.95	123.91	8.92	254.70	255.21
95th-Percentile Queue Length [veh/ln]	3.13	3.22	4.16	3.44	8.66	8.61	0.64	15.42	15.45
95th-Percentile Queue Length [ft/ln]	78.25	80.53	104.10	86.10	216.61	215.19	16.06	385.57	386.21

Movement, Approach, & Intersection Results

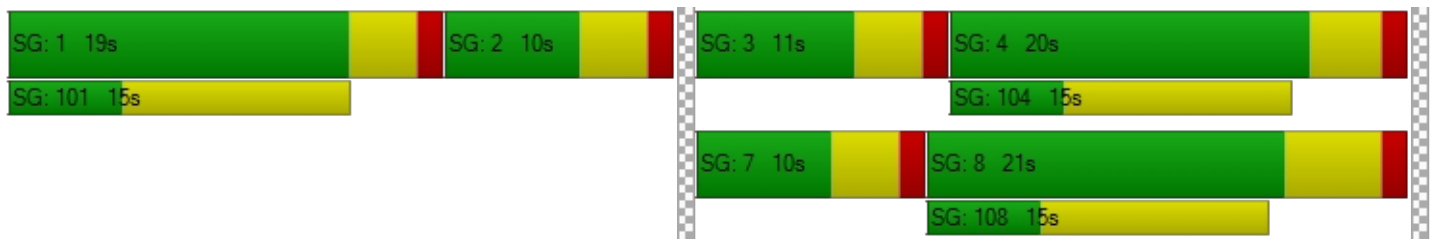
d_M, Delay for Movement [s/veh]	38.28	38.28	38.28	27.63	27.63	31.03	35.89	11.96	11.97	39.14	27.70	28.09
Movement LOS	D	D	D	C	C	C	D	B	B	D	C	C
d_A, Approach Delay [s/veh]	38.28			29.48			14.12			27.87		
Approach LOS	D			C			B			C		
d_I, Intersection Delay [s/veh]	22.81											
Intersection LOS	C											
Intersection V/C	0.756											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	21.68	21.68	0.00
I_p,int, Pedestrian LOS Score for Intersection	1.764	2.130	2.829	0.000
Crosswalk LOS	A	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	200	500	527	523
d_b, Bicycle Delay [s]	24.30	16.88	16.28	16.35
I_b,int, Bicycle LOS Score for Intersection	1.720	2.027	2.591	2.780
Bicycle LOS	A	B	B	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Ethanac Rd @ Murrieta Rd

Control Type:	Signalized	Delay (sec / veh):	35.6
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.797

Intersection Setup

Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	200.00	100.00	100.00	315.00	100.00	100.00	200.00	100.00	100.00	200.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			No		

Volumes

Name	Murrieta Rd			Murrieta Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	92	87	177	18	124	8	2	323	103	227	405	8
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	66	6	0	0	0	208	0	88	227	10
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	102	95	261	26	137	8	2	564	113	338	673	18
Peak Hour Factor	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	27	25	68	7	36	2	1	147	29	88	175	5
Total Analysis Volume [veh/h]	106	99	272	27	143	8	2	588	118	352	701	19
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	1	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	4.3	0.0	3.0	4.7	0.0	3.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	21	0	0	24	0	21	23	0	22	24	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	3.3	0.0	2.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	92	92	92	92	92	92	92	92	92	92	92
L, Total Lost Time per Cycle [s]	4.00	4.00	5.30	5.30	5.30	4.00	5.70	5.70	4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	3.30	3.30	3.30	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	23	23	9	9	9	0	21	21	20	41	41
g / C, Green / Cycle	0.25	0.25	0.10	0.10	0.10	0.00	0.22	0.22	0.22	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.06	0.22	0.02	0.08	0.01	0.00	0.19	0.19	0.20	0.19	0.19
s, saturation flow rate [veh/h]	1781	1656	1781	1870	1589	1781	1870	1763	1781	1870	1853
c, Capacity [veh/h]	443	412	177	186	158	5	421	397	394	829	821
d1, Uniform Delay [s]	27.70	33.57	38.04	40.56	37.65	45.97	34.41	34.45	34.90	17.73	17.73
k, delay calibration	0.11	0.22	0.11	0.11	0.11	0.11	0.13	0.13	0.16	0.13	0.13
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.28	13.52	0.40	6.62	0.13	47.49	6.44	7.06	10.28	0.44	0.45
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.24	0.90	0.15	0.77	0.05	0.41	0.86	0.87	0.89	0.44	0.44
d, Delay for Lane Group [s/veh]	27.97	47.09	38.43	47.18	37.78	93.46	40.85	41.50	45.18	18.17	18.18
Lane Group LOS	C	D	D	D	D	F	D	D	D	B	B
Critical Lane Group	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.80	9.04	0.55	3.36	0.16	0.11	7.98	7.62	8.21	4.79	4.75
50th-Percentile Queue Length [ft/ln]	45.00	226.00	13.85	84.01	4.06	2.69	199.38	190.59	205.26	119.83	118.75
95th-Percentile Queue Length [veh/ln]	3.24	13.97	1.00	6.05	0.29	0.19	12.61	12.15	12.91	8.38	8.32
95th-Percentile Queue Length [ft/ln]	81.00	349.28	24.93	151.21	7.31	4.84	315.17	303.79	322.75	209.59	208.11

Movement, Approach, & Intersection Results

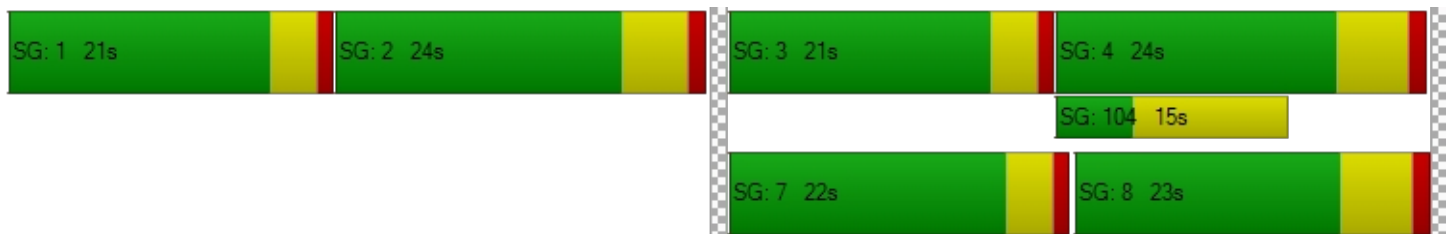
d_M, Delay for Movement [s/veh]	27.97	47.09	47.09	38.43	47.18	37.78	93.46	41.10	41.50	45.18	18.18	18.18
Movement LOS	C	D	D	D	D	D	F	D	D	D	B	B
d_A, Approach Delay [s/veh]	42.84			45.43			41.32			27.04		
Approach LOS	D			D			D			C		
d_I, Intersection Delay [s/veh]	35.63											
Intersection LOS	D											
Intersection V/C	0.797											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			9.0			0.0			0.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	0.00			36.45			0.00			0.00		
I_p,int, Pedestrian LOS Score for Intersection	0.000			2.242			0.000			0.000		
Crosswalk LOS	F			B			F			F		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	378			416			384			407		
d_b, Bicycle Delay [s]	29.61			28.24			29.36			28.56		
I_b,int, Bicycle LOS Score for Intersection	2.347			1.853			2.144			2.444		
Bicycle LOS	B			A			B			B		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Ethanac Rd @ Case Rd/Barnett Rd

Control Type:	Signalized	Delay (sec / veh):	30.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.792

Intersection Setup

Name	Barnett Rd			Case Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			← → ← →			← →			← →		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	230.00	100.00	120.00	150.00	100.00	100.00	110.00	100.00	270.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			40.00			30.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Barnett Rd			Case Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	16	4	54	494	0	145	148	501	17	53	461	478
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0000	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0000	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	42	0	0	0	0	280	0	74	325	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	18	4	101	545	0	160	163	832	19	132	833	527
Peak Hour Factor	0.9700	0.9700	0.9700	0.9700	1.0000	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	1	26	140	0	41	42	214	5	34	215	136
Total Analysis Volume [veh/h]	19	4	104	562	0	165	168	858	20	136	859	543
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Permiss	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	7	0	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	0	5	0	5	0	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	30	0	0	30	30	0	30	30	0
Amber [s]	0.0	3.2	0.0	3.0	0.0	0.0	3.0	3.2	0.0	3.0	4.7	0.0
All red [s]	0.0	1.0	0.0	1.0	0.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	13	0	19	0	0	9	19	0	16	19	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	0.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	5	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	10	0	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No		No				No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	0.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	2.0	0.0	0.0	2.0	2.2	0.0	2.0	3.7	0.0
Minimum Recall		No		No			No	No		No	No	
Maximum Recall		No		No			No	No		No	No	
Pedestrian Recall		No		No			No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	L	R	L	C	R	L	C	R
C, Cycle Length [s]	83	83	83	83	83	83	83	83	83
L, Total Lost Time per Cycle [s]	4.20	4.00	4.00	4.00	4.20	4.20	4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.00	2.00	2.00	2.20	2.20	2.00	3.70	3.70
g_i, Effective Green Time [s]	8	17	17	10	33	33	8	30	30
g / C, Green / Cycle	0.10	0.20	0.20	0.12	0.40	0.40	0.10	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.08	0.16	0.06	0.09	0.24	0.01	0.08	0.24	0.34
s, saturation flow rate [veh/h]	1623	3459	2813	1781	3560	1589	1781	3560	1589
c, Capacity [veh/h]	163	706	574	213	1420	634	177	1283	573
d1, Uniform Delay [s]	36.40	31.34	27.89	35.49	19.74	15.17	36.41	22.34	25.75
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.37
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.89	2.10	0.27	6.46	0.42	0.02	6.93	0.61	22.07
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.78	0.80	0.29	0.79	0.60	0.03	0.77	0.67	0.95
d, Delay for Lane Group [s/veh]	44.29	33.45	28.16	41.94	20.16	15.19	43.34	22.96	47.82
Lane Group LOS	D	C	C	D	C	B	D	C	D
Critical Lane Group	Yes	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.80	5.22	1.33	3.60	6.24	0.22	2.83	6.26	12.47
50th-Percentile Queue Length [ft/ln]	70.12	130.39	33.25	89.89	155.90	5.60	70.65	156.42	311.73
95th-Percentile Queue Length [veh/ln]	5.05	8.96	2.39	6.47	10.33	0.40	5.09	10.36	18.26
95th-Percentile Queue Length [ft/ln]	126.22	224.02	59.86	161.81	258.28	10.08	127.17	258.97	456.51

Movement, Approach, & Intersection Results

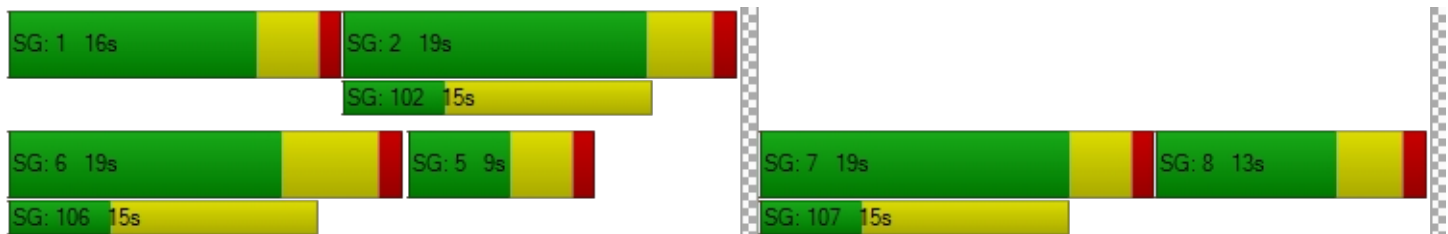
d_M, Delay for Movement [s/veh]	44.29	44.29	44.29	33.45	0.00	28.16	41.94	20.16	15.19	43.34	22.96	47.82
Movement LOS	D	D	D	C		C	D	C	B	D	C	D
d_A, Approach Delay [s/veh]	44.29			32.25			23.56			33.54		
Approach LOS	D			C			C			C		
d_I, Intersection Delay [s/veh]	30.63											
Intersection LOS	C											
Intersection V/C	0.792											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	21.68	21.68	0.00
I_p,int, Pedestrian LOS Score for Intersection	1.833	2.655	2.773	0.000
Crosswalk LOS	A	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	293	500	493	443
d_b, Bicycle Delay [s]	21.85	16.88	17.03	18.17
I_b,int, Bicycle LOS Score for Intersection	1.769	1.560	2.423	2.828
Bicycle LOS	A	A	B	C

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 7: Ethanac Rd @ I-215 SB**

Control Type:	Signalized	Delay (sec / veh):	87.5
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.068

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration				↑↑			↑↑			↑↑↑		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	240.00	100.00	100.00	100.00	275.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			45.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name				I-215 SB			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	0	0	0	112	2	281	0	525	374	109	642	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0600	1.0600	1.0600	1.0000	1.0600	1.0600	1.0600	1.0600	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0600	1.0600	1.0600	1.0000	1.0600	1.0600	1.0600	1.0600	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	304	0	114	0	225	97	333	285	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	430	2	430	0	815	517	456	1007	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9600	0.9600	0.9600	1.0000	0.9600	0.9600	0.9600	0.9600	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	112	1	112	0	212	135	119	262	0
Total Analysis Volume [veh/h]	0	0	0	448	2	448	0	849	539	475	1049	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	5	0	0	5	0	5	5	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	4.3	0.0	0.0	4.7	0.0	3.0	4.7	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	37	0	0	60	0	33	93	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	10	0	0	10	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	3.3	0.0	0.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall					No			No		No	No	
Maximum Recall					No			No		No	No	
Pedestrian Recall					No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		C	R	C	R	L	C
C, Cycle Length [s]		130	130	130	130	130	130
L, Total Lost Time per Cycle [s]		5.30	5.30	5.70	5.70	4.00	5.70
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		3.30	3.30	3.70	3.70	2.00	3.70
g_i, Effective Green Time [s]		32	32	46	46	37	87
g / C, Green / Cycle		0.24	0.24	0.36	0.36	0.28	0.67
(v / s)_i Volume / Saturation Flow Rate		0.25	0.28	0.45	0.34	0.27	0.29
s, saturation flow rate [veh/h]		1781	1589	1870	1589	1781	3560
c, Capacity [veh/h]		434	388	666	566	506	2391
d1, Uniform Delay [s]		49.13	49.13	41.82	40.73	45.39	9.94
k, delay calibration		0.45	0.50	0.50	0.50	0.12	0.50
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		50.55	95.32	134.76	27.55	9.35	0.59
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		1.04	1.16	1.27	0.95	0.94	0.44
d, Delay for Lane Group [s/veh]		99.68	144.45	176.58	68.28	54.74	10.53
Lane Group LOS		F	F	F	E	D	B
Critical Lane Group		No	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		19.74	22.44	45.08	20.20	15.59	6.19
50th-Percentile Queue Length [ft/ln]		493.49	560.89	1127.09	504.90	389.84	154.85
95th-Percentile Queue Length [veh/ln]		27.60	32.75	65.24	27.57	22.07	10.28
95th-Percentile Queue Length [ft/ln]		690.08	818.70	1630.89	689.15	551.75	256.89

Movement, Approach, & Intersection Results

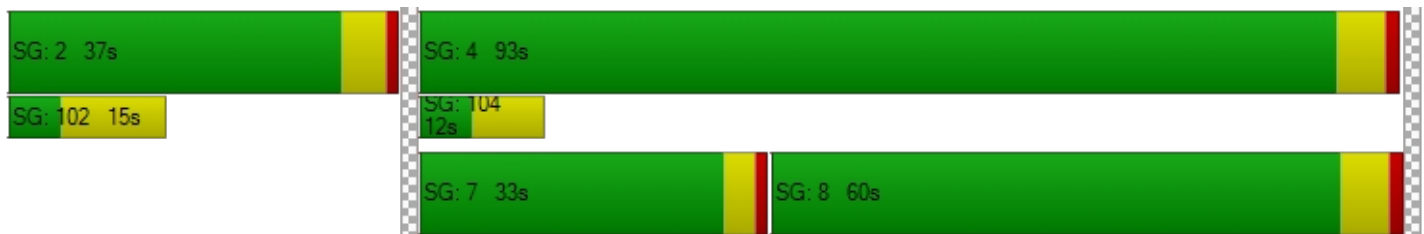
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	99.68	99.68	144.45	0.00	176.58	68.28	54.74	10.53	0.00
Movement LOS				F	F	F		F	E	D	B	
d_A, Approach Delay [s/veh]	0.00			122.02			134.52			24.31		
Approach LOS	A			F			F			C		
d_I, Intersection Delay [s/veh]	87.49											
Intersection LOS	F											
Intersection V/C	1.068											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	56.31	0.00	56.31
I_p,int, Pedestrian LOS Score for Intersection	0.000	2.390	0.000	3.296
Crosswalk LOS	F	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	488	835	1343
d_b, Bicycle Delay [s]	65.00	37.16	22.04	7.01
I_b,int, Bicycle LOS Score for Intersection	4.132	3.041	3.850	2.817
Bicycle LOS	D	C	D	C

Sequence




Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 8: Ethanac Rd @ I-215 NB**

Control Type:	Signalized	Delay (sec / veh):	295.9
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.569

Intersection Setup

Name	I-215 NB						Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	265.00	100.00	100.00	100.00	245.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name	I-215 NB						Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	388	2	187	0	0	0	228	417	0	0	357	147
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0000	1.0000	1.0000	1.0600	1.0600	1.0000	1.0000	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0000	1.0000	1.0000	1.0600	1.0600	1.0000	1.0000	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	114	0	226	0	0	0	97	432	0	0	505	444
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	550	2	436	0	0	0	354	901	0	0	906	609
Peak Hour Factor	0.9400	0.9400	0.9400	1.0000	1.0000	1.0000	0.9400	0.9400	1.0000	1.0000	0.9400	0.9400
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	146	1	116	0	0	0	94	240	0	0	241	162
Total Analysis Volume [veh/h]	585	2	464	0	0	0	377	959	0	0	964	648
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	0	0	0	5	5	0	0	5	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	3.2	0.0	0.0	0.0	0.0	3.0	4.7	0.0	0.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	26	0	0	0	0	9	94	0	0	85	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	7	0	0	0	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	0.0	0.0	2.0	3.7	0.0	0.0	3.7	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R		L	C	C
C, Cycle Length [s]	120	120		120	120	120
L, Total Lost Time per Cycle [s]	4.20	4.20		4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20		2.00	3.70	3.70
g_i, Effective Green Time [s]	22	22		27	88	57
g / C, Green / Cycle	0.18	0.18		0.23	0.74	0.48
(v / s)_i Volume / Saturation Flow Rate	0.33	0.29		0.21	0.51	0.92
s, saturation flow rate [veh/h]	1781	1589		1781	1870	1746
c, Capacity [veh/h]	324	289		403	1376	831
d1, Uniform Delay [s]	49.08	49.08		45.53	8.61	31.44
k, delay calibration	0.50	0.50		0.32	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	377.51	288.00		22.94	2.95	427.48
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.81	1.61		0.93	0.70	1.94
d, Delay for Lane Group [s/veh]	426.58	337.08		68.47	11.55	458.92
Lane Group LOS	F	F		E	B	F
Critical Lane Group	Yes	No		Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	43.62	31.74		13.08	11.00	120.37
50th-Percentile Queue Length [ft/ln]	1090.53	793.48		326.92	274.97	3009.16
95th-Percentile Queue Length [veh/ln]	67.93	49.55		19.01	16.44	192.28
95th-Percentile Queue Length [ft/ln]	1698.36	1238.86		475.19	410.95	4806.99

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	426.58	426.58	337.08	0.00	0.00	0.00	68.47	11.55	0.00	0.00	458.92	458.92
Movement LOS	F	F	F				E	B			F	F
d_A, Approach Delay [s/veh]	387.07			0.00			27.62			458.92		
Approach LOS	F			A			C			F		
d_I, Intersection Delay [s/veh]	295.95											
Intersection LOS	F											
Intersection V/C	1.569											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.242	0.000	0.000	0.000
Crosswalk LOS	B	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	363	0	1472	1322
d_b, Bicycle Delay [s]	40.18	60.00	4.19	6.90
I_b,int, Bicycle LOS Score for Intersection	3.294	4.132	3.764	4.219
Bicycle LOS	C	D	D	D

Sequence

Ring 1	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 9: Ethanac Rd @ Encanto Dr

Control Type:	Two-way stop	Delay (sec / veh):	4,113.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	8.783

Intersection Setup

Name	Encanto Dr		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Encanto Dr		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	115	78	468	126	50	380
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	649	9	0	948
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	129	88	1175	151	56	1375
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	34	23	309	40	15	362
Total Analysis Volume [veh/h]	136	93	1237	159	59	1447
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	8.78	0.48	0.01	0.00	0.12	0.01
d_M, Delay for Movement [s/veh]	4113.83	3900.02	0.00	0.00	13.36	0.00
Movement LOS	F	F	A	A	B	A
95th-Percentile Queue Length [veh/ln]	28.54	28.54	0.00	0.00	0.41	0.00
95th-Percentile Queue Length [ft/ln]	713.61	713.61	0.00	0.00	10.20	0.00
d_A, Approach Delay [s/veh]	4027.00		0.00		0.52	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	294.78					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 10: Ethanac Rd @ Trumble Rd

Control Type:	Signalized	Delay (sec / veh):	52.6
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.021

Intersection Setup

Name	Trumble Rd			Trumble Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇐⇑⇐			⇑⇐⇑			⇑⇑⇑			⇑⇐⇑		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	85.00	100.00	100.00	100.00	100.00	100.00	155.00	100.00	100.00	110.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Trumble Rd			Trumble Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	4	0	4	13	0	108	73	488	7	4	325	13
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	14	0	18	7	642	0	0	931	5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	0	4	29	0	139	89	1190	7	4	1297	20
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	1	8	0	37	23	313	2	1	341	5
Total Analysis Volume [veh/h]	4	0	4	31	0	146	94	1253	7	4	1365	21
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	125
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	0	5	5	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.2	0.0	3.0	3.2	0.0	3.0	4.7	0.0	3.0	4.7	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	14	20	0	10	15	0	9	87	0	9	87	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	5	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	10	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.2	0.0	2.0	2.2	0.0	2.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C
C, Cycle Length [s]	125	125	125	125	125	125	125	125	125
L, Total Lost Time per Cycle [s]	4.00	4.20	4.00	4.20	4.00	5.70	5.70	4.00	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.20	2.00	2.20	2.00	3.70	3.70	2.00	3.70
g_i, Effective Green Time [s]	1	11	3	13	8	92	92	1	85
g / C, Green / Cycle	0.01	0.09	0.03	0.11	0.07	0.74	0.74	0.01	0.68
(v / s)_i Volume / Saturation Flow Rate	0.00	0.00	0.02	0.09	0.05	0.67	0.00	0.00	0.74
s, saturation flow rate [veh/h]	1781	1589	1781	1589	1781	1870	1589	1781	1865
c, Capacity [veh/h]	11	136	48	170	117	1380	1173	11	1265
d1, Uniform Delay [s]	61.90	52.39	60.21	54.92	57.61	13.03	4.32	61.91	20.13
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	19.40	0.09	13.14	11.79	11.87	10.32	0.01	19.89	55.79
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.37	0.03	0.64	0.86	0.80	0.91	0.01	0.37	1.10
d, Delay for Lane Group [s/veh]	81.31	52.48	73.36	66.71	69.48	23.35	4.33	81.80	75.92
Lane Group LOS	F	D	E	E	E	C	A	F	F
Critical Lane Group	Yes	No	No	Yes	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.19	0.12	1.15	5.08	3.23	24.03	0.04	0.18	48.58
50th-Percentile Queue Length [ft/ln]	4.64	2.98	28.81	126.97	80.74	600.84	1.00	4.57	1214.46
95th-Percentile Queue Length [veh/ln]	0.33	0.21	2.07	8.77	5.81	32.07	0.07	0.33	65.05
95th-Percentile Queue Length [ft/ln]	8.35	5.36	51.86	219.37	145.33	801.83	1.81	8.23	1626.36

Movement, Approach, & Intersection Results

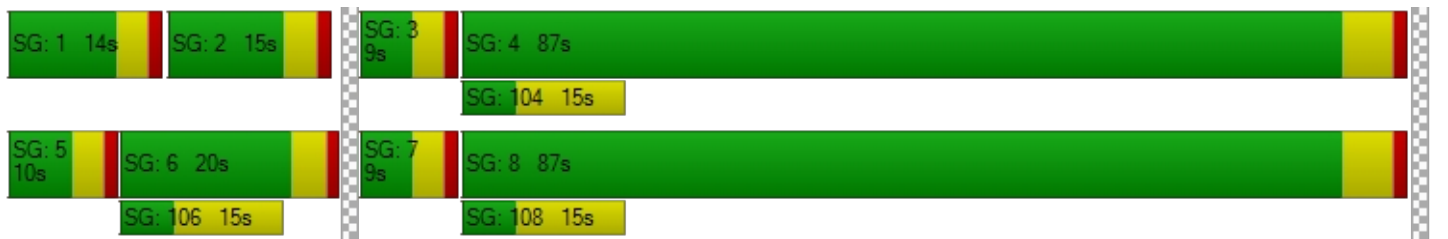
d_M, Delay for Movement [s/veh]	81.31	52.48	52.48	73.36	66.71	66.71	69.48	23.35	4.33	81.80	75.92	75.92
Movement LOS	F	D	D	E	E	E	E	C	A	F	F	E
d_A, Approach Delay [s/veh]	66.89			67.88			26.46			75.94		
Approach LOS	E			E			C			E		
d_I, Intersection Delay [s/veh]	52.55											
Intersection LOS	D											
Intersection V/C	1.021											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	53.82	53.82	0.00	53.82
I_p,int, Pedestrian LOS Score for Intersection	1.964	2.052	0.000	3.408
Crosswalk LOS	A	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	253	173	1301	1301
d_b, Bicycle Delay [s]	47.70	52.17	7.64	7.64
I_b,int, Bicycle LOS Score for Intersection	1.573	1.852	3.794	3.853
Bicycle LOS	A	A	D	D

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 11: Ethanac Rd @ Sherman Rd

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	4.235

Intersection Setup

Name	Sherman Rd			Sherman Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Sherman Rd			Sherman Rd			Ethanac Rd			Ethanac Rd		
Base Volume Input [veh/h]	19	8	5	3	5	90	139	349	3	9	230	1
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	528	56	83	13	34	5	14	308	334	52	403	21
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	549	64	88	16	39	106	170	700	337	63	662	22
Peak Hour Factor	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	146	17	23	4	10	28	45	186	90	17	176	6
Total Analysis Volume [veh/h]	584	68	94	17	41	113	181	745	359	67	704	23
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	4.24	0.29	0.00	3.27	0.26	0.21	0.01	0.00	0.11	0.01	0.00
d_M, Delay for Movement [s/veh]	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10.17	0.00	0.00	11.37	0.00	0.00
Movement LOS	F	F	F	F	F	F	B	A	A	B	A	A
95th-Percentile Queue Length [veh/ln]	96.16	96.16	96.16	24.04	24.04	24.04	0.77	0.77	0.77	0.35	0.35	0.35
95th-Percentile Queue Length [ft/ln]	2403.98	2403.98	2403.98	601.05	601.05	601.05	19.35	19.35	19.35	8.84	8.84	8.84
d_A, Approach Delay [s/veh]	10000.00			10000.00			1.43			0.96		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	3061.62											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 12: Ethanac Rd @ Dawson Rd

Control Type:	Two-way stop	Delay (sec / veh):	519.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.876

Intersection Setup

Name	Dawson Rd		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Dawson Rd		Ethanac Rd		Ethanac Rd	
Base Volume Input [veh/h]	0	1	351	2	3	240
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	216	32	266	138	20	260
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	216	33	660	140	23	529
Peak Hour Factor	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	61	9	188	40	7	150
Total Analysis Volume [veh/h]	245	38	750	159	26	601
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	1.88	0.10	0.01	0.00	0.03	0.01
d_M, Delay for Movement [s/veh]	519.23	501.38	0.00	0.00	9.98	0.00
Movement LOS	F	F	A	A	A	A
95th-Percentile Queue Length [veh/ln]	22.27	22.27	0.00	0.00	0.11	0.11
95th-Percentile Queue Length [ft/ln]	556.66	556.66	0.00	0.00	2.69	2.69
d_A, Approach Delay [s/veh]	516.83		0.00		0.41	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	80.55					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 13: Ethanac Rd @ Antelope Rd

Control Type:	Two-way stop	Delay (sec / veh):	41.7
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.295

Intersection Setup

Name	Antelope Rd			Ethanac Rd			Matthews Rd			Antelope Rd		
Approach	Northbound			Eastbound			Westbound			Southeastbound		
Lane Configuration	←			→			↑			↘		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	250.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			50.00			50.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Antelope Rd			Ethanac Rd			Matthews Rd			Antelope Rd		
Base Volume Input [veh/h]	33	0	15	1	304	13	7	207	8	14	0	0
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0000	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	298	0	0	279	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	36	0	17	1	633	15	7	507	8	16	0	0
Peak Hour Factor	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900	0.8900
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	0	5	0	178	4	2	142	2	4	0	0
Total Analysis Volume [veh/h]	40	0	19	1	711	17	8	570	9	18	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Free	Free	Stop
Flared Lane	No			No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No			No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.29	0.00	0.04	0.00	0.01	0.00	0.01	0.01	0.00	0.14	0.00	0.00
d_M, Delay for Movement [s/veh]	41.72	38.14	23.52	8.62	0.00	0.00	9.15	0.00	0.00	38.22	33.02	16.64
Movement LOS	E	E	C	A	A	A	A	A	A	E	D	C
95th-Percentile Queue Length [veh/ln]	1.40	1.40	1.40	0.00	0.00	0.00	0.03	0.03	0.03	0.48	0.48	0.48
95th-Percentile Queue Length [ft/ln]	34.97	34.97	34.97	0.08	0.08	0.00	0.69	0.69	0.69	12.05	12.05	12.05
d_A, Approach Delay [s/veh]	35.86			0.01			0.12			38.22		
Approach LOS	E			A			A			E		
d_I, Intersection Delay [s/veh]	2.07											
Intersection LOS	E											

**Intersection Level Of Service Report
Intersection 14: SR-74 @ Palomar Rd**

Control Type:	Signalized	Delay (sec / veh):	20.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.799

Intersection Setup

Name	Palomar Rd			Palomar Rd			SR-74			SR-74		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	200.00	100.00	200.00	190.00	100.00	100.00	240.00	100.00	100.00	230.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Palomar Rd			Palomar Rd			SR-74			SR-74		
Base Volume Input [veh/h]	30	66	160	15	38	22	42	1072	12	98	926	28
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	10	115	0	6	0	0	11	0	85	14	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	33	83	291	17	48	24	47	1193	13	193	1035	31
Peak Hour Factor	0.9500	0.9600	0.9600	0.9600	0.9600	0.9500	0.9500	0.9500	0.9500	0.9600	0.9500	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	22	76	4	13	6	12	314	3	50	272	8
Total Analysis Volume [veh/h]	35	86	303	18	50	25	49	1256	14	201	1089	32
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	4.3	0.0	0.0	4.3	0.0	3.0	4.3	0.0	3.0	4.3	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	30	0	0	30	0	30	30	0	30	30	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.3	0.0	0.0	3.3	0.0	2.0	3.3	0.0	2.0	3.3	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	62	62	62	62	62	62	62	62	62	62	62	62
L, Total Lost Time per Cycle [s]	5.30	5.30	5.30	5.30	5.30	5.30	4.00	5.30	5.30	4.00	5.30	5.30
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.30	3.30	3.30	3.30	3.30	3.30	2.00	3.30	3.30	2.00	3.30	3.30
g_i, Effective Green Time [s]	14	14	14	14	14	14	3	24	24	9	30	30
g / C, Green / Cycle	0.23	0.23	0.23	0.23	0.23	0.23	0.05	0.39	0.39	0.14	0.49	0.49
(v / s)_i Volume / Saturation Flow Rate	0.03	0.05	0.19	0.01	0.02	0.02	0.03	0.34	0.34	0.11	0.30	0.30
s, saturation flow rate [veh/h]	1324	1870	1589	1311	1870	1671	1781	1870	1863	1781	1870	1851
c, Capacity [veh/h]	357	431	367	329	431	386	82	728	725	256	911	902
d1, Uniform Delay [s]	21.26	19.19	22.62	22.01	18.68	18.72	28.93	17.49	17.49	25.55	11.65	11.65
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.21	0.21	0.11	0.15	0.16
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.12	0.22	4.75	0.07	0.09	0.11	6.69	6.50	6.55	5.22	0.98	1.00
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.10	0.20	0.83	0.05	0.09	0.10	0.60	0.87	0.87	0.78	0.62	0.62
d, Delay for Lane Group [s/veh]	21.37	19.41	27.37	22.08	18.77	18.83	35.63	23.98	24.04	30.77	12.63	12.65
Lane Group LOS	C	B	C	C	B	B	D	C	C	C	B	B
Critical Lane Group	No	No	Yes	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.39	0.90	4.09	0.20	0.38	0.38	0.80	7.98	7.96	2.89	4.47	4.43
50th-Percentile Queue Length [ft/ln]	9.70	22.38	102.24	5.09	9.57	9.42	19.94	199.43	199.04	72.27	111.68	110.86
95th-Percentile Queue Length [veh/ln]	0.70	1.61	7.36	0.37	0.69	0.68	1.44	12.61	12.59	5.20	7.93	7.89
95th-Percentile Queue Length [ft/ln]	17.46	40.28	184.03	9.16	17.23	16.96	35.90	315.23	314.72	130.08	198.33	197.20

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	21.37	19.41	27.37	22.08	18.78	18.83	35.63	24.01	24.04	30.77	12.64	12.65
Movement LOS	C	B	C	C	B	B	D	C	C	C	B	B
d_A, Approach Delay [s/veh]	25.26			19.43			24.44			15.40		
Approach LOS	C			B			C			B		
d_I, Intersection Delay [s/veh]	20.62											
Intersection LOS	C											
Intersection V/C	0.799											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.503	2.228	3.073	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	549	549	549	549
d_b, Bicycle Delay [s]	23.69	23.69	23.69	23.69
I_b,int, Bicycle LOS Score for Intersection	2.259	1.636	2.648	2.650
Bicycle LOS	B	A	B	B

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 15: SR-74 @ Menifee Rd**

Control Type:	Signalized	Delay (sec / veh):	195.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.290

Intersection Setup

Name	Menifee Rd			Menifee Rd			SR-74			SR-74		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	350.00	100.00	100.00	350.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Menifee Rd			Menifee Rd			SR-74			SR-74		
Base Volume Input [veh/h]	82	158	283	101	175	20	45	1080	102	229	888	93
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	145	0	0	50	57	68	0	170	49	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	90	174	457	111	193	72	107	1258	112	422	1028	103
Peak Hour Factor	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	23	45	119	29	50	19	28	328	29	110	268	27
Total Analysis Volume [veh/h]	94	181	476	116	201	75	111	1310	117	440	1071	107
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	115
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	1	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.9	0.0	0.0	3.9	0.0	3.0	4.7	0.0	3.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	21	0	12	47	0	21	56	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.9	0.0	0.0	2.9	0.0	2.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	L	C	C	L	C	C
C, Cycle Length [s]	115	115	115	115	115	115	115	115	115
L, Total Lost Time per Cycle [s]	4.90	4.90	4.90	4.00	5.70	5.70	4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.90	2.90	2.90	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	21	21	16	8	28	28	31	50	50
g / C, Green / Cycle	0.18	0.18	0.14	0.07	0.24	0.24	0.27	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.15	0.30	0.22	0.06	0.39	0.39	0.25	0.32	0.32
s, saturation flow rate [veh/h]	1839	1589	1783	1781	1870	1817	1781	1870	1811
c, Capacity [veh/h]	337	292	248	128	450	438	476	815	790
d1, Uniform Delay [s]	45.09	46.97	49.54	52.82	43.67	43.67	41.01	26.82	27.00
k, delay calibration	0.13	0.50	0.32	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.55	299.31	274.56	15.40	280.12	287.21	8.06	5.67	6.13
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.81	1.63	1.58	0.86	1.60	1.62	0.92	0.73	0.74
d, Delay for Lane Group [s/veh]	50.64	346.28	324.10	68.22	323.79	330.88	49.07	32.49	33.13
Lane Group LOS	D	F	F	E	F	F	D	C	C
Critical Lane Group	No	Yes	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	7.88	32.39	25.83	3.61	47.19	46.71	12.53	13.67	13.59
50th-Percentile Queue Length [ft/ln]	196.92	809.67	645.68	90.32	1179.63	1167.70	313.27	341.77	339.78
95th-Percentile Queue Length [veh/ln]	12.48	50.69	40.43	6.50	72.36	71.87	18.34	19.73	19.64
95th-Percentile Queue Length [ft/ln]	311.99	1267.22	1010.81	162.58	1809.11	1796.76	458.41	493.36	490.93

Movement, Approach, & Intersection Results

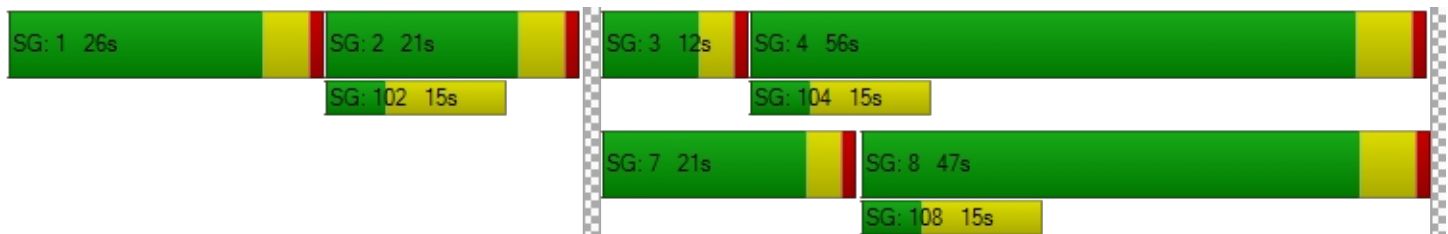
d_M, Delay for Movement [s/veh]	50.64	50.64	346.28	324.10	324.10	324.10	68.22	326.98	330.88	49.07	32.78	33.13
Movement LOS	D	D	F	F	F	F	E	F	F	D	C	C
d_A, Approach Delay [s/veh]	238.02			324.10			308.60			37.23		
Approach LOS	F			F			F			D		
d_I, Intersection Delay [s/veh]	195.55											
Intersection LOS	F											
Intersection V/C	1.290											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	48.85	48.85	48.85	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.607	2.242	3.216	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	367	280	718	875
d_b, Bicycle Delay [s]	38.34	42.53	23.62	18.20
I_b,int, Bicycle LOS Score for Intersection	2.799	2.206	2.828	2.894
Bicycle LOS	C	B	C	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 16: SR-74 @ Briggs Rd**

Control Type:	Signalized	Delay (sec / veh):	37.4
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.722

Intersection Setup

Name	Briggs Rd			Briggs Rd			SR-74			SR-74		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇐⇑⇓			⇑⇓⇐			⇑⇓⇐⇑⇓			⇑⇓⇐		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	200.00	100.00	100.00	150.00	100.00	100.00	130.00	100.00	1084.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			50.00			50.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Briggs Rd			Briggs Rd			SR-74			SR-74		
Base Volume Input [veh/h]	140	59	62	141	48	87	86	1225	183	46	944	70
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	182	0	0	0	0	6	10	39	164	0	31	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	337	65	68	156	53	101	104	1389	365	51	1072	77
Peak Hour Factor	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700	0.9700
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	87	17	18	40	14	26	27	358	94	13	276	20
Total Analysis Volume [veh/h]	347	67	70	161	55	104	107	1432	376	53	1105	79
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	105
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	1	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	4.3	0.0	3.0	4.7	0.0	3.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	21	0	9	21	0	37	49	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	3.3	0.0	2.0	3.7	0.0	2.0	3.7	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	C
C, Cycle Length [s]	105	105	105	105	105	105	105	105	105	105
L, Total Lost Time per Cycle [s]	4.00	4.00	5.30	5.30	4.00	5.70	5.70	4.00	5.70	5.70
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	3.30	3.30	2.00	3.70	3.70	2.00	3.70	3.70
g_i, Effective Green Time [s]	22	22	12	12	8	48	48	4	44	44
g / C, Green / Cycle	0.21	0.21	0.12	0.12	0.07	0.46	0.46	0.04	0.42	0.42
(v / s)_i Volume / Saturation Flow Rate	0.19	0.08	0.09	0.09	0.06	0.40	0.24	0.03	0.32	0.32
s, saturation flow rate [veh/h]	1781	1715	1781	1676	1781	3560	1589	1781	1870	1826
c, Capacity [veh/h]	373	359	205	193	131	1618	722	71	787	769
d1, Uniform Delay [s]	40.79	35.69	45.23	45.45	48.02	26.18	20.50	49.92	25.91	25.93
k, delay calibration	0.22	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	17.80	0.66	6.44	8.43	11.77	7.50	2.67	13.99	6.81	7.01
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.93	0.38	0.78	0.82	0.82	0.89	0.52	0.74	0.76	0.76
d, Delay for Lane Group [s/veh]	58.59	36.36	51.68	53.88	59.79	33.68	23.18	63.91	32.73	32.94
Lane Group LOS	E	D	D	D	E	C	C	E	C	C
Critical Lane Group	Yes	No	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	10.25	2.97	4.31	4.36	3.07	16.19	6.50	1.60	13.04	12.81
50th-Percentile Queue Length [ft/ln]	256.28	74.26	107.71	109.09	76.79	404.79	162.55	40.04	325.97	320.16
95th-Percentile Queue Length [veh/ln]	15.50	5.35	7.71	7.79	5.53	22.79	10.68	2.88	18.96	18.68
95th-Percentile Queue Length [ft/ln]	387.56	133.67	192.81	194.73	138.21	569.77	267.09	72.07	474.02	466.89

Movement, Approach, & Intersection Results

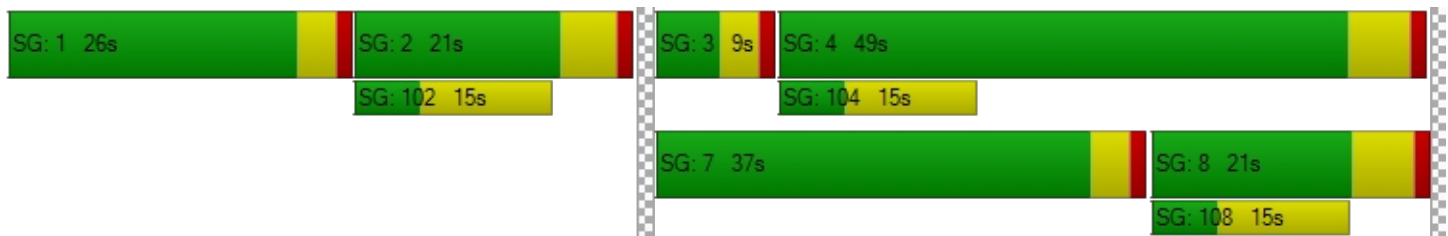
d_M, Delay for Movement [s/veh]	58.59	36.36	36.36	51.68	53.88	53.88	59.79	33.68	23.18	63.91	32.83	32.94
Movement LOS	E	D	D	D	D	D	E	C	C	E	C	C
d_A, Approach Delay [s/veh]	52.30			52.77			33.08			34.17		
Approach LOS	D			D			C			C		
d_I, Intersection Delay [s/veh]	37.36											
Intersection LOS	D											
Intersection V/C	0.722											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	43.89	43.89	43.89	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.421	2.228	3.402	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	419	299	291	825
d_b, Bicycle Delay [s]	32.80	37.97	38.31	18.13
I_b,int, Bicycle LOS Score for Intersection	2.358	2.088	3.139	2.580
Bicycle LOS	B	B	C	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 17: Matthews Rd @ Palomar Rd

Control Type:	Two-way stop	Delay (sec / veh):	62.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.417

Intersection Setup

Name	Palomar Rd		Matthews Rd		Matthews Rd	
Approach	Southbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	0	0
Entry Pocket Length [ft]	100.00	200.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Palomar Rd		Matthews Rd		Matthews Rd	
Base Volume Input [veh/h]	38	158	66	62	219	121
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	91	188	0	124	174
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	42	265	261	68	366	308
Peak Hour Factor	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	68	67	17	93	79
Total Analysis Volume [veh/h]	43	270	266	69	373	314
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.42	0.37	0.00	0.00	0.30	0.00
d_M, Delay for Movement [s/veh]	62.84	12.65	0.00	0.00	9.22	0.00
Movement LOS	F	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.74	1.68	0.00	0.00	1.30	1.30
95th-Percentile Queue Length [ft/ln]	43.53	41.97	0.00	0.00	32.47	32.47
d_A, Approach Delay [s/veh]	19.54		0.00		5.01	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	7.16					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 18: McLaughlin Rd @ Murrieta Rd

Control Type:	Two-way stop	Delay (sec / veh):	31.7
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.082

Intersection Setup

Name	Murrieta Rd			Murrieta Rd			McLaughlin Rd			McLaughlin Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔			↔			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	55.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Murrieta Rd			Murrieta Rd			McLaughlin Rd			McLaughlin Rd		
Base Volume Input [veh/h]	4	287	3	21	366	5	4	0	5	1	2	9
Base Volume Adjustment Factor	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	60	0	0	79	10	6	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	462	4	30	591	17	11	0	7	1	3	13
Peak Hour Factor	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	124	1	8	159	5	3	0	2	0	1	3
Total Analysis Volume [veh/h]	5	497	4	32	635	18	12	0	8	1	3	14
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.03	0.01	0.00	0.08	0.00	0.02	0.01	0.02	0.02
d_M, Delay for Movement [s/veh]	8.88	0.00	0.00	8.49	0.00	0.00	31.68	27.67	14.58	29.53	26.40	11.79
Movement LOS	A	A	A	A	A	A	D	D	B	D	D	B
95th-Percentile Queue Length [veh/ln]	0.02	0.00	0.00	0.09	0.00	0.00	0.33	0.33	0.33	0.15	0.15	0.15
95th-Percentile Queue Length [ft/ln]	0.40	0.00	0.00	2.33	0.00	0.00	8.15	8.15	8.15	3.82	3.82	3.82
d_A, Approach Delay [s/veh]	0.09			0.40			24.84			15.21		
Approach LOS	A			A			C			C		
d_I, Intersection Delay [s/veh]	0.88											
Intersection LOS	D											

Intersection Level Of Service Report
Intersection 19: McLaughlin Rd @ Encanto Dr

Control Type:	Two-way stop	Delay (sec / veh):	12.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.184

Intersection Setup

Name	Encanto Dr		Encanto Dr		McLaughlin Rd	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00		50.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Encanto Dr		Encanto Dr		McLaughlin Rd	
Base Volume Input [veh/h]	113	10	51	98	12	37
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	55	0	9	89	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	125	66	56	117	102	40
Peak Hour Factor	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	33	17	15	30	27	10
Total Analysis Volume [veh/h]	130	69	58	122	106	42
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.04	0.00	0.18	0.05
d_M, Delay for Movement [s/veh]	0.00	0.00	7.74	0.00	12.94	10.78
Movement LOS	A	A	A	A	B	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.13	0.13	0.89	0.89
95th-Percentile Queue Length [ft/ln]	0.00	0.00	3.30	3.30	22.28	22.28
d_A, Approach Delay [s/veh]	0.00		2.49		12.32	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	4.31					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 20: McLaughlin Rd @ Trumble Rd

Control Type:	All-way stop	Delay (sec / veh):	7.5
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.108

Intersection Setup

Name	Trumble Rd			Trumble Rd			McLaughlin Rd			McLaughlin Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Trumble Rd			Trumble Rd			McLaughlin Rd			McLaughlin Rd		
Base Volume Input [veh/h]	32	4	0	0	0	7	8	0	25	0	0	0
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	20	12	43	0	0	70	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	35	4	0	0	0	27	20	43	28	0	70	0
Peak Hour Factor	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	1	0	0	0	7	5	11	7	0	19	0
Total Analysis Volume [veh/h]	37	4	0	0	0	29	21	46	30	0	74	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	799	962	896	861
Degree of Utilization, x	0.05	0.03	0.11	0.09

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.16	0.09	0.36	0.28
95th-Percentile Queue Length [ft]	4.05	2.33	9.07	7.03
Approach Delay [s/veh]	7.75	6.86	7.51	7.57
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	7.49			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 21: McLaughlin Rd @ Sherman Rd

Control Type:	Two-way stop	Delay (sec / veh):	10.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

Name	Sherman Rd			Sherman Rd			McLaughlin Rd			Dawson Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Sherman Rd			Sherman Rd			McLaughlin Rd			Dawson Rd		
Base Volume Input [veh/h]	0	5	0	0	2	0	0	1	0	0	0	0
Base Volume Adjustment Factor	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	5	0	0	0	70	43	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	12	0	0	3	70	43	1	0	0	0	0
Peak Hour Factor	0.4200	0.4200	0.4200	0.4200	0.4200	0.4200	0.4200	0.4200	0.4200	0.4200	0.4200	0.4200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	7	0	0	2	42	26	1	0	0	0	0
Total Analysis Volume [veh/h]	0	29	0	0	7	167	102	2	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.57	0.00	0.00	7.27	0.00	0.00	9.79	10.25	9.31	9.22	10.19	8.44
Movement LOS	A	A	A	A	A	A	A	B	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.41	0.41	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	10.35	10.35	10.35	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00			0.00			9.80			9.29		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	3.32											
Intersection LOS	B											

**Intersection Level Of Service Report
Intersection 22: Rouse Rd @ Murrieta Rd**

Control Type:	Two-way stop	Delay (sec / veh):	35.9
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.165

Intersection Setup

Name	Murrieta Rd			Murrieta Rd			Rouse Rd			Rouse Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	150.00	100.00	100.00	100.00	100.00	100.00	151.00	100.00	250.00	150.00	100.00	150.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Murrieta Rd			Murrieta Rd			Rouse Rd			Rouse Rd		
Base Volume Input [veh/h]	6	254	18	33	289	13	11	11	3	11	11	48
Base Volume Adjustment Factor	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	42	0	19	50	10	6	0	0	0	0	12
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	8	397	25	66	454	28	22	16	4	16	16	79
Peak Hour Factor	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	106	7	18	121	7	6	4	1	4	4	21
Total Analysis Volume [veh/h]	9	422	27	70	483	30	23	17	4	17	17	84
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.06	0.00	0.00	0.17	0.09	0.01	0.10	0.09	0.13
d_M, Delay for Movement [s/veh]	8.45	0.00	0.00	8.46	0.00	0.00	35.87	24.68	11.21	28.48	24.77	11.57
Movement LOS	A	A	A	A	A	A	E	C	B	D	C	B
95th-Percentile Queue Length [veh/ln]	0.03	0.00	0.00	0.20	0.00	0.00	0.57	0.28	0.02	0.33	0.28	0.46
95th-Percentile Queue Length [ft/ln]	0.65	0.00	0.00	5.03	0.00	0.00	14.26	6.89	0.52	8.18	6.92	11.43
d_A, Approach Delay [s/veh]	0.17			1.02			29.30			15.91		
Approach LOS	A			A			D			C		
d_I, Intersection Delay [s/veh]	3.19											
Intersection LOS	E											

**Intersection Level Of Service Report
Intersection 23: Rouse Rd @ Encanto Dr**

Control Type:	Two-way stop	Delay (sec / veh):	13.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.096

Intersection Setup

Name	Encanto Dr		Encanto Dr		Rouse Rd	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00		50.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Encanto Dr		Encanto Dr		Rouse Rd	
Base Volume Input [veh/h]	85	75	18	119	33	14
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	55	9	9	89	5	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	148	92	29	220	41	16
Peak Hour Factor	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	42	26	8	63	12	5
Total Analysis Volume [veh/h]	168	105	33	250	47	18
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.03	0.00	0.10	0.02
d_M, Delay for Movement [s/veh]	0.00	0.00	7.86	0.00	13.22	10.27
Movement LOS	A	A	A	A	B	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.08	0.08	0.40	0.40
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.97	1.97	9.96	9.96
d_A, Approach Delay [s/veh]	0.00		0.92		12.40	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	1.72					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 24: McCall Blvd @ Bradley Rd

Control Type:	Signalized	Delay (sec / veh):	72.6
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.094

Intersection Setup

Name	Bradley Rd			Bradley Rd			McCall Blvd			McCall Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	90.00	100.00	100.00	365.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	Bradley Rd			Bradley Rd			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	68	56	524	92	48	10	19	524	67	463	619	111
Base Volume Adjustment Factor	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	11	0	0	0	0	108	0	18	92	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	95	78	745	128	67	14	27	842	93	666	958	156
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	25	21	196	34	18	4	7	222	24	175	252	41
Total Analysis Volume [veh/h]	100	82	784	135	71	15	28	886	98	701	1008	164
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Overlap	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	6	0	5	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	5	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	30	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.2	3.2	0.0	3.0	0.0	3.0	3.6	0.0	3.0	3.6	0.0
All red [s]	0.0	1.0	1.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	36	36	0	13	0	37	33	0	38	34	0
Vehicle Extension [s]	0.0	3.0	3.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	5	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	26	26	0	0	0	0	23	0	0	22	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	2.2	0.0	2.0	0.0	2.0	2.6	0.0	2.0	2.6	0.0
Minimum Recall		No	No		No		No	No		No	No	
Maximum Recall		No	No		No		No	No		No	No	
Pedestrian Recall		No	No		No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	L	C	C	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.20	4.20	4.00	4.00	4.00	4.00	4.60	4.60	4.00	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20	0.00	2.00	2.00	2.00	2.60	2.60	2.00	2.60	2.60
g_i, Effective Green Time [s]	25	25	70	9	9	3	29	29	40	66	66
g / C, Green / Cycle	0.21	0.21	0.58	0.08	0.08	0.03	0.24	0.24	0.34	0.55	0.55
(v / s)_i Volume / Saturation Flow Rate	0.06	0.04	0.49	0.08	0.05	0.02	0.27	0.27	0.39	0.31	0.33
s, saturation flow rate [veh/h]	1781	1870	1589	1781	1814	1781	1870	1805	1781	1870	1782
c, Capacity [veh/h]	379	398	925	134	136	45	445	430	596	1023	975
d1, Uniform Delay [s]	39.41	38.91	20.69	55.50	53.89	57.91	45.72	45.72	39.94	17.95	18.31
k, delay calibration	0.11	0.11	0.50	0.11	0.11	0.11	0.50	0.50	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.37	0.25	9.50	38.86	4.77	13.17	81.37	82.07	96.28	2.35	2.72
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.26	0.21	0.85	1.01	0.63	0.62	1.12	1.12	1.18	0.57	0.60
d, Delay for Lane Group [s/veh]	39.78	39.16	30.19	94.36	58.66	71.09	127.09	127.79	136.22	20.30	21.02
Lane Group LOS	D	D	C	F	E	E	F	F	F	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.51	2.03	19.51	5.48	2.70	1.00	23.08	22.37	32.98	10.94	11.14
50th-Percentile Queue Length [ft/ln]	62.87	50.81	487.86	136.95	67.59	25.01	577.12	559.29	824.45	273.54	278.44
95th-Percentile Queue Length [veh/ln]	4.53	3.66	26.76	9.35	4.87	1.80	33.11	32.21	47.03	16.37	16.61
95th-Percentile Queue Length [ft/ln]	113.17	91.46	668.98	233.74	121.66	45.03	827.75	805.22	1175.67	409.16	415.28

Movement, Approach, & Intersection Results

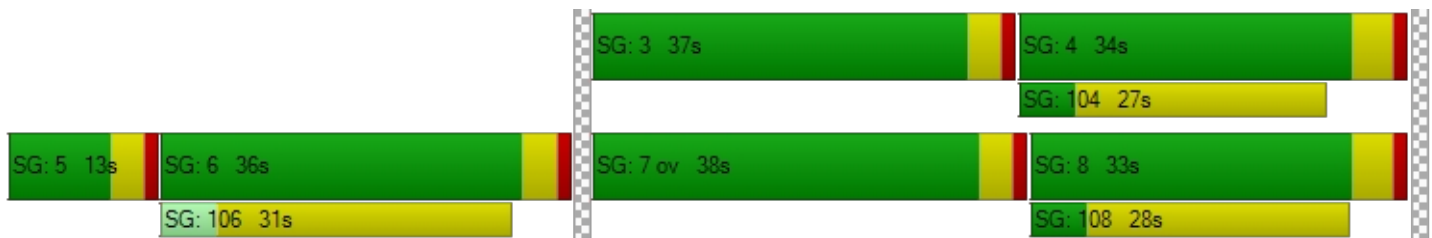
d_M, Delay for Movement [s/veh]	39.78	39.16	30.19	94.36	58.66	58.66	71.09	127.39	127.79	136.22	20.60	21.02
Movement LOS	D	D	C	F	E	E	E	F	F	F	C	C
d_A, Approach Delay [s/veh]	31.94			80.47			125.88			63.91		
Approach LOS	C			F			F			E		
d_I, Intersection Delay [s/veh]	72.62											
Intersection LOS	E											
Intersection V/C	1.094											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	0.00
l_p,int, Pedestrian LOS Score for Intersection	2.594	2.116	2.801	0.000
Crosswalk LOS	B	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	530	150	473	490
d_b, Bicycle Delay [s]	32.41	51.34	34.96	34.20
l_b,int, Bicycle LOS Score for Intersection	3.154	1.924	2.395	3.105
Bicycle LOS	C	A	B	C

Sequence




Ring 1	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 25: McCall Blvd @ I-215 SB

Control Type:	Signalized	Delay (sec / veh):	66.7
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.025

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	455.00	100.00	100.00	400.00	235.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name				I-215 SB			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	0	0	0	324	1	490	0	895	293	289	858	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0600	1.0600	1.0600	1.0000	1.0600	1.0600	1.0600	1.0600	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	181	0	0	0	119	0	136	110	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	538	1	541	0	1106	323	455	1056	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9600	0.9600	0.9600	1.0000	0.9600	0.9600	0.9600	0.9600	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	140	0	141	0	288	84	118	275	0
Total Analysis Volume [veh/h]	0	0	0	560	1	564	0	1152	336	474	1100	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing in		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	80
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	5	0	0	5	0	5	5	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	3.2	0.0	0.0	3.6	0.0	3.0	3.6	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	39	0	0	31	0	10	41	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	24	0	0	21	0	0	15	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	2.2	0.0	0.0	2.6	0.0	2.0	2.6	0.0
Minimum Recall					No			No		No	No	
Maximum Recall					No			No		No	No	
Pedestrian Recall					No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		C	R	C	R	L	C
C, Cycle Length [s]		101	101	101	101	101	101
L, Total Lost Time per Cycle [s]		4.20	4.20	4.60	4.60	4.00	4.60
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		2.20	2.20	2.60	2.60	2.00	2.60
g_i, Effective Green Time [s]		30	30	30	30	29	63
g / C, Green / Cycle		0.30	0.30	0.30	0.30	0.28	0.62
(v / s)_i Volume / Saturation Flow Rate		0.31	0.35	0.32	0.21	0.27	0.31
s, saturation flow rate [veh/h]		1781	1589	3560	1589	1781	3560
c, Capacity [veh/h]		527	471	1054	471	501	2197
d1, Uniform Delay [s]		35.65	35.65	35.65	31.81	35.65	10.75
k, delay calibration		0.49	0.50	0.11	0.23	0.38	0.11
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		56.89	108.20	45.66	4.26	23.92	0.18
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		1.06	1.20	1.09	0.71	0.95	0.50
d, Delay for Lane Group [s/veh]		92.53	143.85	81.30	36.08	59.57	10.93
Lane Group LOS		F	F	F	D	E	B
Critical Lane Group		No	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		21.03	25.48	19.21	7.68	14.38	6.16
50th-Percentile Queue Length [ft/ln]		525.80	636.99	480.22	191.98	359.53	153.90
95th-Percentile Queue Length [veh/ln]		29.69	37.53	27.86	12.22	20.60	10.23
95th-Percentile Queue Length [ft/ln]		742.20	938.16	696.56	305.60	515.01	255.63

Movement, Approach, & Intersection Results

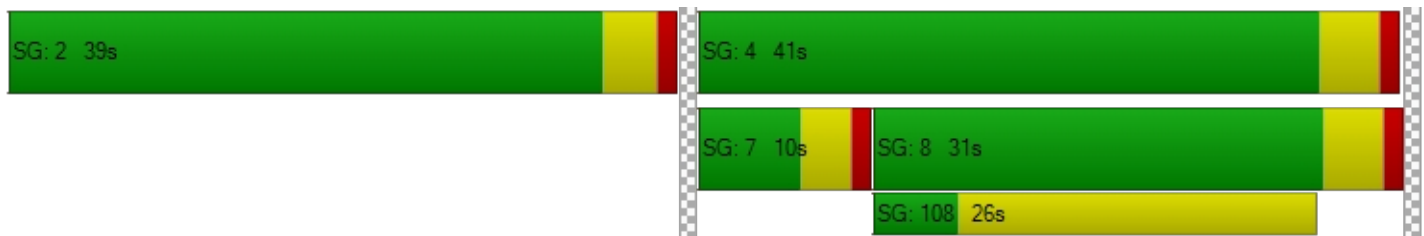
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	92.53	92.53	143.85	0.00	81.30	36.08	59.57	10.93	0.00
Movement LOS				F	F	F		F	D	E	B	
d_A, Approach Delay [s/veh]	0.00			118.26			71.09			25.58		
Approach LOS	A			F			E			C		
d_I, Intersection Delay [s/veh]	66.65											
Intersection LOS	E											
Intersection V/C	1.025											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	31.51	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.210	0.000	0.000	0.000
Crosswalk LOS	B	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	870	660	910
d_b, Bicycle Delay [s]	40.00	12.77	17.96	11.88
I_b,int, Bicycle LOS Score for Intersection	4.132	3.416	2.787	2.858
Bicycle LOS	D	C	C	C

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 26: McCall Blvd @ I-215 NB

Control Type:	Signalized	Delay (sec / veh):	46.4
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.975

Intersection Setup

Name	I-215 NB						McCall Blvd			McCall Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	240.00	100.00	100.00	100.00	250.00	100.00	100.00	100.00	100.00	320.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name	I-215 NB						McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	397	5	378	0	0	0	301	927	0	0	725	173
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0000	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0000	1.0000	1.0000	1.0600	1.0600	1.0000	1.0000	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	190	0	0	0	0	300	0	0	246	131
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	438	5	607	0	0	0	332	1322	0	0	1045	322
Peak Hour Factor	0.9700	0.9700	0.9700	1.0000	1.0000	1.0000	0.9700	0.9700	1.0000	1.0000	0.9700	0.9700
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	113	1	156	0	0	0	86	341	0	0	269	83
Total Analysis Volume [veh/h]	452	5	626	0	0	0	342	1363	0	0	1077	332
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	0	0	5	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	0	0	0	5	5	0	0	5	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	3.2	0.0	0.0	0.0	0.0	3.0	3.6	0.0	0.0	3.6	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	38	0	0	0	0	21	52	0	0	31	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	3	0	0	0	0	0	17	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	0.0	0.0	2.0	2.6	0.0	0.0	2.6	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R		L	C	C	R
C, Cycle Length [s]	90	90		90	90	90	90
L, Total Lost Time per Cycle [s]	4.20	4.20		4.00	4.60	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20		2.00	2.60	2.60	2.60
g_i, Effective Green Time [s]	34	34		17	47	26	26
g / C, Green / Cycle	0.38	0.38		0.19	0.53	0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.26	0.39		0.19	0.38	0.30	0.21
s, saturation flow rate [veh/h]	1782	1589		1781	3560	3560	1589
c, Capacity [veh/h]	668	596		338	1878	1044	466
d1, Uniform Delay [s]	23.68	28.16		36.50	16.29	31.84	28.44
k, delay calibration	0.22	0.49		0.14	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.52	50.50		28.82	2.49	36.18	8.93
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.68	1.05		1.01	0.73	1.03	0.71
d, Delay for Lane Group [s/veh]	26.20	78.67		65.32	18.78	68.01	37.37
Lane Group LOS	C	F		F	B	F	D
Critical Lane Group	No	Yes		Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	8.30	20.50		9.87	10.28	16.01	7.27
50th-Percentile Queue Length [ft/ln]	207.51	512.55		246.72	256.88	400.26	181.74
95th-Percentile Queue Length [veh/ln]	13.03	28.90		15.11	15.53	23.01	11.69
95th-Percentile Queue Length [ft/ln]	325.64	722.40		377.75	388.31	575.25	292.28

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	26.20	26.20	78.67	0.00	0.00	0.00	65.32	18.78	0.00	0.00	68.01	37.37
Movement LOS	C	C	F				F	B			F	D
d_A, Approach Delay [s/veh]	56.53			0.00			28.12			60.79		
Approach LOS	E			A			C			E		
d_I, Intersection Delay [s/veh]	46.42											
Intersection LOS	D											
Intersection V/C	0.975											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.244	0.000	0.000	0.000
Crosswalk LOS	B	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	751	0	1053	587
d_b, Bicycle Delay [s]	17.55	45.00	10.08	22.47
I_b,int, Bicycle LOS Score for Intersection	3.347	4.132	2.966	2.722
Bicycle LOS	C	D	C	B

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 27: McCall Blvd @ Encanto Dr

Control Type:	Signalized	Delay (sec / veh):	49.3
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.825

Intersection Setup

Name	Encanto Dr			Encanto Dr			McCall Blvd			McCall Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	130.00	100.00	130.00	80.00	100.00	100.00	100.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Encanto Dr			Encanto Dr			McCall Blvd			McCall Blvd		
Base Volume Input [veh/h]	173	25	3	33	25	115	164	903	238	36	610	35
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	11	0	27	18	50	37	453	0	0	327	17
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	191	39	3	63	46	177	218	1448	263	39	999	55
Peak Hour Factor	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	49	10	1	16	12	45	56	369	67	10	255	14
Total Analysis Volume [veh/h]	195	40	3	64	47	181	222	1478	268	40	1019	56
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing in	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.2	0.0	0.0	3.2	0.0	3.0	3.6	0.0	3.0	3.6	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	31	0	0	31	0	9	20	0	9	20	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	17	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.2	0.0	0.0	2.2	0.0	2.0	2.6	0.0	2.0	2.6	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	L	C	C	L	C	C
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70	70
L, Total Lost Time per Cycle [s]	4.20	4.20	4.20	4.20	4.20	4.00	4.60	4.60	4.00	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.20	2.20	2.20	2.20	2.20	2.00	2.60	2.60	2.00	2.60	2.60
g_i, Effective Green Time [s]	23	23	23	23	23	11	31	31	3	23	23
g / C, Green / Cycle	0.33	0.33	0.33	0.33	0.33	0.15	0.45	0.45	0.04	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	0.17	0.02	0.00	0.05	0.14	0.12	0.47	0.49	0.02	0.29	0.29
s, saturation flow rate [veh/h]	1152	1870	1589	1367	1640	1781	1870	1774	1781	1870	1836
c, Capacity [veh/h]	329	620	527	499	544	274	838	795	69	622	611
d1, Uniform Delay [s]	27.37	16.08	15.76	18.62	18.28	28.78	19.43	19.43	33.28	22.09	22.09
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.21	0.21
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.71	0.04	0.00	0.11	0.52	5.63	42.61	62.34	7.46	7.25	7.39
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.59	0.06	0.01	0.13	0.42	0.81	1.04	1.10	0.58	0.87	0.87
d, Delay for Lane Group [s/veh]	29.08	16.12	15.77	18.73	18.79	34.41	62.05	81.77	40.73	29.33	29.48
Lane Group LOS	C	B	B	B	B	C	F	F	D	C	C
Critical Lane Group	Yes	No	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.16	0.42	0.03	0.75	2.77	3.83	21.55	24.79	0.78	8.83	8.69
50th-Percentile Queue Length [ft/ln]	79.08	10.58	0.78	18.83	69.27	95.68	538.67	619.82	19.59	220.66	217.36
95th-Percentile Queue Length [veh/ln]	5.69	0.76	0.06	1.36	4.99	6.89	30.06	35.26	1.41	13.70	13.53
95th-Percentile Queue Length [ft/ln]	142.34	19.04	1.40	33.89	124.68	172.23	751.55	881.47	35.26	342.47	338.25

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	29.08	16.12	15.77	18.73	18.79	18.79	34.41	70.12	81.77	40.73	29.40	29.48
Movement LOS	C	B	B	B	B	B	C	E	F	D	C	C
d_A, Approach Delay [s/veh]	26.73			18.78			67.68			29.81		
Approach LOS	C			B			E			C		
d_I, Intersection Delay [s/veh]	49.34											
Intersection LOS	D											
Intersection V/C	0.825											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	21.68	0.00	21.68
I_p,int, Pedestrian LOS Score for Intersection	2.256	2.119	0.000	2.977
Crosswalk LOS	B	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	893	893	513	513
d_b, Bicycle Delay [s]	9.19	9.19	16.58	16.58
I_b,int, Bicycle LOS Score for Intersection	1.952	2.041	3.183	2.479
Bicycle LOS	A	B	C	B

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 28: Sherman Rd @ Project dwy 1

Control Type:	Two-way stop	Delay (sec / veh):	26.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.111

Intersection Setup

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

Volumes

Name	Sherman Rd		Sherman Rd		Westbound	
Base Volume Input [veh/h]	32	0	0	17	0	0
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	354	21	196	224	33	313
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	390	21	196	243	33	313
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	103	6	52	64	9	82
Total Analysis Volume [veh/h]	411	22	206	256	35	329
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			Yes
Number of Storage Spaces in Median	0	0	1

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.18	0.00	0.11	0.52
d_M, Delay for Movement [s/veh]	0.00	0.00	8.91	0.00	26.55	20.81
Movement LOS	A	A	A	A	D	C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.67	0.00	4.42	4.42
95th-Percentile Queue Length [ft/ln]	0.00	0.00	16.69	0.00	110.39	110.39
d_A, Approach Delay [s/veh]	0.00		3.97		21.37	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	7.63					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 29: Sherman Rd @ Project dwy 2

Control Type:	Two-way stop	Delay (sec / veh):	14.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.075

Intersection Setup

Name	Sherman Rd		Sherman Rd		Eastbound	
Approach	Northbound		Southbound			
Lane Configuration	↶		↷		↷	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Sherman Rd		Sherman Rd		Eastbound	
Base Volume Input [veh/h]	0	32	17	0	0	0
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	346	235	22	29	2
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	382	254	22	29	2
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	101	67	6	8	1
Total Analysis Volume [veh/h]	1	402	267	23	31	2
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.07	0.00
d_M, Delay for Movement [s/veh]	7.83	0.00	0.00	0.00	14.39	10.44
Movement LOS	A	A	A	A	B	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.25	0.25
95th-Percentile Queue Length [ft/ln]	0.06	0.06	0.00	0.00	6.26	6.26
d_A, Approach Delay [s/veh]	0.02		0.00		14.15	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	0.65					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 30: Sherman Rd @ Project dwy 3

Control Type:	Two-way stop	Delay (sec / veh):	23.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.044

Intersection Setup

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

Volumes

Name	Sherman Rd			Sherman Rd								
Base Volume Input [veh/h]	0	32	0	0	17	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	27	21	196	35	5	9	0	1	33	0	311
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	63	21	196	54	5	9	0	1	33	0	311
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	17	6	52	14	1	2	0	0	9	0	82
Total Analysis Volume [veh/h]	1	66	22	206	57	5	9	0	1	35	0	327
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.14	0.00	0.00	0.04	0.00	0.00	0.09	0.00	0.33
d_M, Delay for Movement [s/veh]	7.34	0.00	0.00	7.77	0.00	0.00	23.15	15.31	9.32	17.05	17.46	11.66
Movement LOS	A	A	A	A	A	A	C	C	A	C	C	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.47	0.00	0.00	0.14	0.14	0.14	2.10	2.10	2.10
95th-Percentile Queue Length [ft/ln]	0.05	0.05	0.05	11.83	0.00	0.00	3.47	3.47	3.47	52.61	52.61	52.61
d_A, Approach Delay [s/veh]	0.08			5.97			21.76			12.18		
Approach LOS	A			A			C			B		
d_I, Intersection Delay [s/veh]	8.55											
Intersection LOS	C											

**Intersection Level Of Service Report
Intersection 31: Trumble Rd @ Project dwy 4**

Control Type:	Two-way stop	Delay (sec / veh):	8.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.011

Intersection Setup

Name	Trumble Rd		Trumble Rd		Project dwy	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Trumble Rd		Trumble Rd		Project dwy	
Base Volume Input [veh/h]	12	0	0	7	0	0
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	6	0	0	10	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	13	6	0	7	10	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	2	0	2	3	0
Total Analysis Volume [veh/h]	14	6	0	7	11	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.26	0.00	8.67	8.43
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.03	0.03
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.84	0.84
d_A, Approach Delay [s/veh]	0.00		0.00		8.67	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.51					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 32: Trumble Rd @ Project dwy 5

Control Type:	Two-way stop	Delay (sec / veh):	8.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.011

Intersection Setup

Name	Trumble Rd		Trumble Rd		Project dwy	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Trumble Rd		Trumble Rd		Project dwy	
Base Volume Input [veh/h]	12	0	0	7	0	0
Base Volume Adjustment Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	6	6	0	10	10	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	19	6	0	17	10	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	2	0	4	3	0
Total Analysis Volume [veh/h]	20	6	0	18	11	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.27	0.00	8.75	8.46
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.03	0.03
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.86	0.86
d_A, Approach Delay [s/veh]	0.00		0.00		8.75	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.75					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 33: Dawson Rd @ Project dwy 6

Control Type:	Two-way stop	Delay (sec / veh):	11.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.201

Intersection Setup

Name	Dawson Rd		Dawson Rd		Eastbound	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration	↶		↷		↷	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Dawson Rd		Dawson Rd		Eastbound	
Base Volume Input [veh/h]	0	1	5	0	0	0
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	105	70	88	143	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	106	75	88	143	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	28	20	23	38	0
Total Analysis Volume [veh/h]	0	112	79	93	151	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.20	0.00
d_M, Delay for Movement [s/veh]	7.56	0.00	0.00	0.00	11.00	10.10
Movement LOS	A	A	A	A	B	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.75	0.75
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	18.70	18.70
d_A, Approach Delay [s/veh]	0.00		0.00		11.00	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	3.82					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 34: Dawson Rd @ Project dwy 7

Control Type:	Two-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.115

Intersection Setup

Name	Dawson Rd		Dawson Rd		Eastbound	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration	↰		↳		↻	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Dawson Rd		Dawson Rd		Eastbound	
Base Volume Input [veh/h]	0	1	5	0	0	0
Base Volume Adjustment Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	70	105	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1	5	70	105	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	1	18	28	0
Total Analysis Volume [veh/h]	0	1	5	74	111	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.11	0.00
d_M, Delay for Movement [s/veh]	7.37	0.00	0.00	0.00	9.20	8.98
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.39	0.39
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	9.68	9.68
d_A, Approach Delay [s/veh]	0.00		0.00		9.20	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	5.35					
Intersection LOS	A					

Appendix D-5

**Opening Day with Cumulative Projects
and Improvements**

Option 1: Copy of Case Rd/Bonnie Dr @ I-215 SB

Number	1					
Intersection	Case Rd/Bonnie Dr @ I-215 SB					
Control Type	Signalized					
Analysis Method	HCM 6th Edition					
Name	Case Rd		I-215 SB		Bonnie Dr	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Base Volume Input [veh/h]	708	415	656	20	37	178
Total Analysis Volume [veh/h]	822	474	753	27	63	253

Intersection Settings

Cycle Length [s]	125					
Coordination Type	Time of Day Pattern Coordinated					
Actuation Type	Fully actuated					
Lost time [s]	6.00					
Control Type	Protected	Permissive	Permissive	Overlap	Split	Overlap
Signal Group	1	6	2	2	3	3
Auxiliary Signal Groups				1,2,3,6		1,2,3,6
Lead / Lag	Lag	-	-	-	Lead	-
Minimum Green [s]	5	5	5	5	5	5
Maximum Green [s]	30	30	30	30	30	30
Amber [s]	3.0	4.3	4.3	4.3	4.3	4.3
All red [s]	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	65	106	41	41	19	19
Walk [s]	0	5	5	5	5	5
Pedestrian Clearance [s]	0	17	7	7	10	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0
Minimum Recall	No	No	No	No	No	No
Maximum Recall	No	No	No	No	No	No
Pedestrian Recall	No	No	No	No	No	No
Pedestrian Signal Group	0					
Pedestrian Walk [s]	0					
Pedestrian Clearance [s]	0					

Lane Group Calculations

g / C, Green / Cycle	0.49	0.86	0.34	1.27	0.06	1.27
(v / s)_i Volume / Saturation Flow Rate	0.58	0.25	0.21	0.02	0.04	0.16
so, Base Saturation Flow per Lane [pc/h/ln]	1900	1900	1900	1900	1900	1900
Arrival type	3		3		3	
s, saturation flow rate [veh/h]	1417	1870	3560	1589	1781	1589
c, Capacity [veh/h]	721	1608	1213	2013	99	2013
X, volume / capacity	1.14	0.29	0.62	0.01	0.64	0.13
d, Delay for Lane Group [s/veh]	114.58	2.11	36.83	0.01	64.53	0.13
Lane Group LOS	F	A	D	A	E	A
Critical Lane Group	Yes	No	Yes	No	Yes	No

50th-Percentile Queue Length [veh/ln]	37.69	1.03	9.64	0.01	2.09	0.07
50th-Percentile Queue Length [ft/ln]	942.20	25.81	240.89	0.17	52.34	1.80
95th-Percentile Queue Length [veh/ln]	52.65	1.86	14.73	0.01	3.77	0.13
95th-Percentile Queue Length [ft/ln]	1316.24	46.46	368.16	0.31	94.20	3.23

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	114.58	2.11	36.83	0.01	64.53	0.13
Movement LOS	F	A	D	A	E	A
Critical Movement	Yes	No	No	No	No	No
d_A, Approach Delay [s/veh]	73.44		35.56		12.97	
Approach LOS	E		D		B	
d_I, Intersection Delay [s/veh]	53.10					
Intersection LOS	D					
Intersection V/C	0.869					

Option 1: Copy of Ethanac Rd @ I-215 SB

Number	7											
Intersection	Ethanac Rd @ I-215 SB											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name				I-215 SB			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Base Volume Input [veh/h]	0	0	0	103	1	200	0	589	402	112	619	0
Total Analysis Volume [veh/h]	0	0	0	533	1	310	0	941	572	224	861	0

Intersection Settings

Cycle Length [s]	75											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Fully actuated											
Lost time [s]	8.00											
Control Type	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	5	0	0	5	0	5	5	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	4.3	0.0	0.0	4.7	0.0	3.0	4.7	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	29	0	0	37	0	9	46	0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	10	0	0	10	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall					No			No		No	No	
Maximum Recall					No			No		No	No	
Pedestrian Recall					No			No		No	No	
Pedestrian Signal Group	0											
Pedestrian Walk [s]	0											
Pedestrian Clearance [s]	0											

Lane Group Calculations

g / C, Green / Cycle		0.32	0.32	0.39	0.39	0.10	0.54
(v / s)_i Volume / Saturation Flow Rate		0.30	0.20	0.26	0.36	0.06	0.24
so, Base Saturation Flow per Lane [pc/h/ln]		1900	1900	1900	1900	1900	1900
Arrival type	3	3		3		3	
s, saturation flow rate [veh/h]		1781	1589	3560	1589	3459	3560
c, Capacity [veh/h]		562	502	1376	614	341	1916
X, volume / capacity		0.95	0.62	0.68	0.93	0.66	0.45
d, Delay for Lane Group [s/veh]		42.21	23.13	22.03	45.00	34.83	11.35
Lane Group LOS		D	C	C	D	C	B
Critical Lane Group		Yes	No	No	Yes	Yes	No

50th-Percentile Queue Length [veh/ln]		10.83	4.30	6.28	11.94	1.90	3.53
50th-Percentile Queue Length [ft/ln]		270.79	107.45	157.12	298.51	47.58	88.17
95th-Percentile Queue Length [veh/ln]		16.23	7.70	10.40	17.61	3.43	6.35
95th-Percentile Queue Length [ft/ln]		405.73	192.45	259.90	440.19	85.64	158.70

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	42.21	42.21	23.13	0.00	22.03	45.00	34.83	11.35	0.00
Movement LOS				D	D	C		C	D	C	B	
Critical Movement				No	No	No		No	Yes	No	No	
d_A, Approach Delay [s/veh]	0.00			35.20			30.71			16.20		
Approach LOS	A			D			C			B		
d_I, Intersection Delay [s/veh]	27.24											
Intersection LOS	C											
Intersection V/C	0.811											

Option 1: Copy of Ethanac Rd @ I-215 SB

Number	7											
Intersection	Ethanac Rd @ I-215 SB											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name				I-215 SB			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Base Volume Input [veh/h]	0	0	0	112	2	281	0	525	374	109	642	0
Total Analysis Volume [veh/h]	0	0	0	448	2	448	0	849	539	475	1049	0

Intersection Settings

Cycle Length [s]	80											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Fully actuated											
Lost time [s]	8.00											
Control Type	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	5	0	0	5	0	5	5	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	4.3	0.0	0.0	4.7	0.0	3.0	4.7	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	28	0	0	37	0	15	52	0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	10	0	0	10	0	0	7	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall					No			No		No	No	
Maximum Recall					No			No		No	No	
Pedestrian Recall					No			No		No	No	
Pedestrian Signal Group	0											
Pedestrian Walk [s]	0											
Pedestrian Clearance [s]	0											

Lane Group Calculations

g / C, Green / Cycle		0.28	0.28	0.35	0.35	0.17	0.58
(v / s)_i Volume / Saturation Flow Rate		0.25	0.28	0.24	0.34	0.14	0.29
so, Base Saturation Flow per Lane [pc/h/ln]		1900	1900	1900	1900	1900	1900
Arrival type	3	3		3		3	
s, saturation flow rate [veh/h]		1781	1589	3560	1589	3459	3560
c, Capacity [veh/h]		505	451	1260	563	606	2062
X, volume / capacity		0.89	0.99	0.67	0.96	0.78	0.51
d, Delay for Lane Group [s/veh]		36.89	56.92	24.86	54.18	33.90	10.97
Lane Group LOS		D	E	C	D	C	B
Critical Lane Group		No	Yes	No	Yes	Yes	No

50th-Percentile Queue Length [veh/ln]		8.76	11.26	6.40	13.13	4.20	4.40
50th-Percentile Queue Length [ft/ln]		219.11	281.49	159.90	328.20	105.12	110.11
95th-Percentile Queue Length [veh/ln]		13.62	16.76	10.54	19.07	7.57	7.85
95th-Percentile Queue Length [ft/ln]		340.48	419.07	263.59	476.75	189.19	196.15

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	36.89	36.89	56.92	0.00	24.86	54.18	33.90	10.97	0.00
Movement LOS				D	D	E		C	D	C	B	
Critical Movement				No	No	Yes		No	No	No	No	
d_A, Approach Delay [s/veh]	0.00			46.88			36.25			18.12		
Approach LOS	A			D			D			B		
d_I, Intersection Delay [s/veh]	31.50											
Intersection LOS	C											
Intersection V/C	0.842											

Option 1: Copy of Ethanac Rd @ I-215 NB

Number	8											
Intersection	Ethanac Rd @ I-215 NB											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	I-215 NB						Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Base Volume Input [veh/h]	288	3	109	0	0	0	204	487	0	0	456	152
Total Analysis Volume [veh/h]	421	3	439	0	0	0	347	1157	0	0	702	315

Intersection Settings

Cycle Length [s]	60											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Fully actuated											
Lost time [s]	8.00											
Control Type	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	0	0	0	5	5	0	0	5	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	3.2	0.0	0.0	0.0	0.0	3.0	4.7	0.0	0.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	25	0	0	0	0	24	35	0	0	11	0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	7	0	0	0	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Pedestrian Signal Group	0											
Pedestrian Walk [s]	0											
Pedestrian Clearance [s]	0											

Lane Group Calculations

g / C, Green / Cycle	0.31	0.31		0.15	0.52	0.31	0.31	
(v / s)_i Volume / Saturation Flow Rate	0.24	0.28		0.10	0.32	0.20	0.20	
so, Base Saturation Flow per Lane [pc/h/ln]	1900	1900		1900	1900	1900	1900	
Arrival type	3		3		3		3	
s, saturation flow rate [veh/h]	1782	1589		3459	3560	3560	1589	
c, Capacity [veh/h]	558	498		506	1860	1102	492	
X, volume / capacity	0.76	0.88		0.69	0.62	0.64	0.64	
d, Delay for Lane Group [s/veh]	20.79	25.48		26.02	11.75	20.69	24.16	
Lane Group LOS	C	C		C	B	C	C	
Critical Lane Group	No	Yes		No	Yes	No	No	

50th-Percentile Queue Length [veh/ln]	5.12	6.02		2.14	3.98	3.80	3.89
50th-Percentile Queue Length [ft/ln]	127.93	150.61		53.38	99.53	95.05	97.15
95th-Percentile Queue Length [veh/ln]	8.83	10.05		3.84	7.17	6.84	6.99
95th-Percentile Queue Length [ft/ln]	220.68	251.24		96.09	179.16	171.10	174.86

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	20.79	20.79	25.48	0.00	0.00	0.00	26.02	11.75	0.00	0.00	20.69	24.16
Movement LOS	C	C	C				C	B			C	C
Critical Movement	No	No	No				Yes	No			No	No
d_A, Approach Delay [s/veh]	23.18			0.00			15.04			21.76		
Approach LOS	C			A			B			C		
d_I, Intersection Delay [s/veh]	19.14											
Intersection LOS	B											
Intersection V/C	0.693											

Option 1: Copy of Ethanac Rd @ I-215 NB

Number	8											
Intersection	Ethanac Rd @ I-215 NB											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	I-215 NB						Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Base Volume Input [veh/h]	388	2	187	0	0	0	228	417	0	0	357	147
Total Analysis Volume [veh/h]	585	2	464	0	0	0	377	959	0	0	964	648

Intersection Settings

Cycle Length [s]	105											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Fully actuated											
Lost time [s]	8.00											
Control Type	Split	Split	Split	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	0	0	0	5	5	0	0	5	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	3.2	0.0	0.0	0.0	0.0	3.0	4.7	0.0	0.0	4.7	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	39	0	0	0	0	9	66	0	0	57	0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	7	0	0	0	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Pedestrian Signal Group	0											
Pedestrian Walk [s]	0											
Pedestrian Clearance [s]	0											

Lane Group Calculations

g / C, Green / Cycle	0.33	0.33		0.14	0.57	0.40	0.40	
(v / s)_i Volume / Saturation Flow Rate	0.33	0.29		0.11	0.27	0.27	0.41	
so, Base Saturation Flow per Lane [pc/h/ln]	1900	1900		1900	1900	1900	1900	
Arrival type	3		3		3		3	
s, saturation flow rate [veh/h]	1781	1589		3459	3560	3560	1589	
c, Capacity [veh/h]	590	527		467	2045	1429	638	
X, volume / capacity	0.99	0.88		0.81	0.47	0.67	1.02	
d, Delay for Lane Group [s/veh]	68.91	47.73		47.43	13.79	28.37	71.12	
Lane Group LOS	E	D		D	B	C	F	
Critical Lane Group	Yes	No		Yes	No	No	Yes	

50th-Percentile Queue Length [veh/ln]	20.10	13.02		4.75	5.88	9.54	21.59
50th-Percentile Queue Length [ft/ln]	502.61	325.53		118.81	146.94	238.62	539.86
95th-Percentile Queue Length [veh/ln]	27.46	18.94		8.33	9.85	14.61	29.55
95th-Percentile Queue Length [ft/ln]	686.45	473.47		208.19	246.34	365.29	738.86

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	68.91	68.91	47.73	0.00	0.00	0.00	47.43	13.79	0.00	0.00	28.37	71.12
Movement LOS	E	E	D				D	B			C	F
Critical Movement	No	No	No				No	No			No	Yes
d_A, Approach Delay [s/veh]	59.56			0.00			23.28			45.56		
Approach LOS	E			A			C			D		
d_I, Intersection Delay [s/veh]	41.79											
Intersection LOS	D											
Intersection V/C	0.916											

Option 1: Copy of Ethanac Rd @ Encanto Dr

Number	9					
Intersection	Ethanac Rd @ Encanto Dr					
Control Type	Signalized					
Analysis Method	HCM 6th Edition					
Name	Encanto Dr		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Base Volume Input [veh/h]	92	75	485	115	41	519
Total Analysis Volume [veh/h]	112	91	1475	143	49	920

Intersection Settings

Cycle Length [s]	60					
Coordination Type	Time of Day Pattern Coordinated					
Actuation Type	Fully actuated					
Lost time [s]	6.00					
Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	4	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	5	0	5	5
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	19	0	19	0	22	41
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	10	0	10	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Pedestrian Signal Group	0					
Pedestrian Walk [s]	0					
Pedestrian Clearance [s]	0					

Lane Group Calculations

g / C, Green / Cycle	0.17	0.54	0.54	0.05	0.67
(v / s)_i Volume / Saturation Flow Rate	0.13	0.48	0.50	0.03	0.29
so, Base Saturation Flow per Lane [pc/h/ln]	1900	1900	1900	1900	1900
Arrival type	3	3		3	
s, saturation flow rate [veh/h]	1521	1683	1632	1603	3204
c, Capacity [veh/h]	255	915	887	80	2156
X, volume / capacity	0.79	0.88	0.91	0.62	0.43
d, Delay for Lane Group [s/veh]	25.63	18.11	21.16	30.90	3.91
Lane Group LOS	C	B	C	C	A
Critical Lane Group	Yes	No	Yes	Yes	No

50th-Percentile Queue Length [veh/ln]	2.43	7.46	8.23	0.64	0.53
50th-Percentile Queue Length [ft/ln]	60.87	186.39	205.84	16.08	13.36
95th-Percentile Queue Length [veh/ln]	4.38	11.93	12.94	1.16	0.96
95th-Percentile Queue Length [ft/ln]	109.56	298.33	323.48	28.94	24.04

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	25.63	25.63	19.49	21.16	30.90	3.91
Movement LOS	C	C	B	C	C	A
Critical Movement	No	No	No	No	Yes	No
d_A, Approach Delay [s/veh]	25.63		19.64		5.27	
Approach LOS	C		B		A	
d_I, Intersection Delay [s/veh]	15.08					
Intersection LOS	B					
Intersection V/C	0.749					

Option 1: Copy of Ethanac Rd @ Encanto Dr

Number	9					
Intersection	Ethanac Rd @ Encanto Dr					
Control Type	Signalized					
Analysis Method	HCM 6th Edition					
Name	Encanto Dr		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Base Volume Input [veh/h]	115	78	468	126	50	380
Total Analysis Volume [veh/h]	136	93	1191	159	59	1399

Intersection Settings

Cycle Length [s]	105					
Coordination Type	Time of Day Pattern Coordinated					
Actuation Type	Fully actuated					
Lost time [s]	0.00					
Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	4	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	5	0	5	5
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.2	0.0	3.2	0.0	3.0	4.7
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	20	0	29	0	56	85
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	10	0	10	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Pedestrian Signal Group	0					
Pedestrian Walk [s]	0					
Pedestrian Clearance [s]	0					

Lane Group Calculations

g / C, Green / Cycle	0.19	0.48	0.48	0.06	0.60
(v / s)_i Volume / Saturation Flow Rate	0.15	0.40	0.42	0.04	0.44
so, Base Saturation Flow per Lane [pc/h/ln]	1900	1900	1900	1900	1900
Arrival type	3	3		3	
s, saturation flow rate [veh/h]	1528	1683	1616	1603	3204
c, Capacity [veh/h]	288	815	783	93	1912
X, volume / capacity	0.79	0.83	0.86	0.64	0.73
d, Delay for Lane Group [s/veh]	22.79	13.62	15.46	28.26	7.21
Lane Group LOS	C	B	B	C	A
Critical Lane Group	Yes	No	Yes	Yes	No

50th-Percentile Queue Length [veh/ln]	2.41	4.95	5.37	0.69	1.84
50th-Percentile Queue Length [ft/ln]	60.32	123.66	134.32	17.15	46.07
95th-Percentile Queue Length [veh/ln]	4.34	8.59	9.17	1.24	3.32
95th-Percentile Queue Length [ft/ln]	108.57	214.84	229.35	30.88	82.93

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	22.79	22.79	14.42	15.46	28.26	7.21
Movement LOS	C	C	B	B	C	A
Critical Movement	No	No	No	No	Yes	No
d_A, Approach Delay [s/veh]	22.79		14.54		8.07	
Approach LOS	C		B		A	
d_I, Intersection Delay [s/veh]	12.05					
Intersection LOS	B					
Intersection V/C	0.604					

Option 1: Copy of Ethanac Rd @ Trumble Rd

Number	10											
Intersection	Ethanac Rd @ Trumble Rd											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	Trumble Rd			Trumble Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Base Volume Input [veh/h]	4	1	6	17	1	138	109	432	2	7	437	14
Total Analysis Volume [veh/h]	4	1	7	25	1	179	156	1456	2	8	854	33

Intersection Settings

Cycle Length [s]	75											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Fully actuated											
Lost time [s]	16.00											
Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	0	5	5	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.2	0.0	3.0	3.2	0.0	3.0	4.7	0.0	3.0	4.7	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	27	20	0	17	10	0	17	29	0	9	21	0
Walk [s]	0	5	0	0	5	0	5	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	10	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Pedestrian Signal Group	0											
Pedestrian Walk [s]	0											
Pedestrian Clearance [s]	0											

Lane Group Calculations

g / C, Green / Cycle	0.01	0.12	0.03	0.14	0.11	0.60	0.60	0.01	0.50	0.50
(v / s)_i Volume / Saturation Flow Rate	0.00	0.00	0.01	0.11	0.09	0.39	0.39	0.00	0.24	0.24
so, Base Saturation Flow per Lane [pc/h/ln]	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Arrival type	3		3		3			3		
s, saturation flow rate [veh/h]	1781	1620	1781	1591	1781	1870	1869	1781	1870	1846
c, Capacity [veh/h]	12	192	51	224	202	1127	1127	21	938	925
X, volume / capacity	0.32	0.04	0.49	0.81	0.77	0.65	0.65	0.38	0.48	0.48
d, Delay for Lane Group [s/veh]	51.44	29.46	42.92	38.02	38.63	12.61	12.61	47.64	14.02	14.04
Lane Group LOS	D	C	D	D	D	B	B	D	B	B
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	Yes	No	No

50th-Percentile Queue Length [veh/ln]	0.12	0.13	0.54	3.47	2.87	6.22	6.22	0.20	4.30	4.25
50th-Percentile Queue Length [ft/ln]	3.02	3.24	13.51	86.84	71.65	155.55	155.54	4.96	107.57	106.33
95th-Percentile Queue Length [veh/ln]	0.22	0.23	0.97	6.25	5.16	10.31	10.31	0.36	7.70	7.64
95th-Percentile Queue Length [ft/ln]	5.43	5.83	24.31	156.31	128.97	257.82	257.81	8.93	192.62	190.88

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	51.44	29.46	29.46	42.92	38.02	38.02	38.63	12.61	12.61	47.64	14.03	14.04
Movement LOS	D	C	C	D	D	D	D	B	B	D	B	B
Critical Movement	Yes	No	No	No	No	No	No	No	No	No	No	No
d_A, Approach Delay [s/veh]	36.79			38.62			15.12			14.33		
Approach LOS	D			D			B			B		
d_I, Intersection Delay [s/veh]	16.73											
Intersection LOS	B											
Intersection V/C	0.648											

Option 1: Copy of Ethanac Rd @ Sherman Rd

Number	11											
Intersection	Ethanac Rd @ Sherman Rd											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	Sherman Rd			Sherman Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Base Volume Input [veh/h]	6	3	2	4	3	102	97	340	13	8	354	3
Total Analysis Volume [veh/h]	170	17	22	27	64	143	126	774	583	99	587	9

Intersection Settings

Cycle Length [s]	85											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Fully actuated											
Lost time [s]	0.00											
Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	7	4	0	3	8	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	0	5	5	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.2	0.0	3.0	3.2	0.0	3.0	4.7	0.0	3.0	4.7	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	13	22	0	16	25	0	16	29	0	18	31	0
Walk [s]	0	5	0	0	5	0	0	5	0	5	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	10	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Pedestrian Signal Group	0											
Pedestrian Walk [s]	0											
Pedestrian Clearance [s]	0											

Lane Group Calculations

g / C, Green / Cycle	0.09	0.19	0.03	0.13	0.13	0.10	0.44	0.44	0.08	0.42	0.42	
(v / s)_i Volume / Saturation Flow Rate	0.05	0.03	0.02	0.04	0.10	0.08	0.46	0.41	0.06	0.18	0.18	
so, Base Saturation Flow per Lane [pc/h/ln]	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Arrival type	3			3			3			3		
s, saturation flow rate [veh/h]	3113	1531	1603	1683	1431	1603	1683	1431	1603	1683	1674	
c, Capacity [veh/h]	268	287	48	221	188	162	741	630	128	705	701	
X, volume / capacity	0.63	0.14	0.56	0.29	0.76	0.78	1.04	0.93	0.78	0.42	0.42	
d, Delay for Lane Group [s/veh]	32.59	23.30	42.38	27.43	34.75	37.79	62.63	35.13	40.40	14.39	14.40	
Lane Group LOS	C	C	D	C	C	D	F	D	D	B	B	
Critical Lane Group	Yes	No	No	No	Yes	No	Yes	No	Yes	No	No	

50th-Percentile Queue Length [veh/ln]	1.39	0.52	0.56	0.94	2.47	2.16	17.92	9.65	1.78	2.68	2.67
50th-Percentile Queue Length [ft/ln]	34.66	12.91	13.88	23.61	61.86	54.00	447.98	241.34	44.43	67.09	66.78
95th-Percentile Queue Length [veh/ln]	2.50	0.93	1.00	1.70	4.45	3.89	25.65	14.75	3.20	4.83	4.81
95th-Percentile Queue Length [ft/ln]	62.38	23.24	24.98	42.50	111.34	97.21	641.37	368.73	79.98	120.76	120.20

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	32.59	23.30	23.30	42.38	27.43	34.75	37.79	62.63	35.13	40.40	14.40	14.40
Movement LOS	C	C	C	D	C	C	D	F	D	D	B	B
Critical Movement	No	No	No	No	No	No	No	Yes	No	No	No	No
d_A, Approach Delay [s/veh]	30.85			33.63			49.71			18.10		
Approach LOS	C			C			D			B		
d_I, Intersection Delay [s/veh]	38.39											
Intersection LOS	D											
Intersection V/C	0.676											

Option 1: Copy of Ethanac Rd @ Sherman Rd

Number	11											
Intersection	Ethanac Rd @ Sherman Rd											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	Sherman Rd			Sherman Rd			Ethanac Rd			Ethanac Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Base Volume Input [veh/h]	19	8	5	3	5	90	139	349	3	9	230	1
Total Analysis Volume [veh/h]	584	68	94	17	41	113	181	745	359	67	704	23

Intersection Settings

Cycle Length [s]	90											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Fully actuated											
Lost time [s]	0.00											
Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss
Signal Group	7	4	0	3	8	8	5	2	2	1	6	0
Auxiliary Signal Groups						5,8			2,7			
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	5	5	5	5	5	5	0
Maximum Green [s]	30	30	0	30	30	30	30	30	30	30	30	0
Amber [s]	3.0	4.7	0.0	3.0	4.7	4.7	3.0	4.3	4.3	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	13	45	0	9	41	41	10	26	26	10	26	0
Walk [s]	0	5	0	0	5	5	0	5	5	5	5	0
Pedestrian Clearance [s]	0	20	0	0	20	20	0	15	15	10	15	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No	No	No	No	
Maximum Recall	No	No		No	No		No	No	No	No	No	
Pedestrian Recall	No	No		No	No		No	No	No	No	No	
Pedestrian Signal Group	0											
Pedestrian Walk [s]	0											
Pedestrian Clearance [s]	0											

Lane Group Calculations

g / C, Green / Cycle	0.23	0.32	0.02	0.10	0.10	0.14	0.37	0.67	0.05	0.31	0.31	
(v / s)_i Volume / Saturation Flow Rate	0.19	0.11	0.01	0.02	0.08	0.11	0.44	0.25	0.04	0.22	0.22	
so, Base Saturation Flow per Lane [pc/h/ln]	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Arrival type	3			3			3			3		
s, saturation flow rate [veh/h]	3113	1527	1603	1683	1431	1603	1683	1431	1603	1683	1664	
c, Capacity [veh/h]	730	485	32	174	148	220	628	963	85	513	507	
X, volume / capacity	0.80	0.33	0.53	0.24	0.76	0.82	1.19	0.37	0.79	0.71	0.71	
d, Delay for Lane Group [s/veh]	31.09	21.34	52.03	33.83	43.07	41.18	124.67	6.15	52.46	27.29	27.33	
Lane Group LOS	C	C	D	C	D	D	F	A	D	C	C	
Critical Lane Group	Yes	No	No	No	Yes	No	Yes	No	Yes	No	No	

50th-Percentile Queue Length [veh/ln]	5.32	2.29	0.44	0.75	2.43	3.61	27.54	1.79	1.56	5.82	5.76
50th-Percentile Queue Length [ft/ln]	132.91	57.29	11.04	18.83	60.71	90.26	688.57	44.64	39.06	145.42	143.99
95th-Percentile Queue Length [veh/ln]	9.10	4.12	0.79	1.36	4.37	6.50	40.34	3.21	2.81	9.77	9.70
95th-Percentile Queue Length [ft/ln]	227.45	103.12	19.87	33.89	109.28	162.47	1008.52	80.36	70.30	244.31	242.39

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	31.09	21.34	21.34	52.03	33.83	43.07	41.18	124.67	6.15	52.46	27.31	27.33
Movement LOS	C	C	C	D	C	D	D	F	A	D	C	C
Critical Movement	No	No	No	No	No	No	No	Yes	No	No	No	No
d_A, Approach Delay [s/veh]	28.97			41.75			79.80			29.43		
Approach LOS	C			D			E			C		
d_I, Intersection Delay [s/veh]	51.62											
Intersection LOS	D											
Intersection V/C	0.751											

Option 1: Copy of Ethanac Rd @ Dawson Rd

Number	12					
Intersection	Ethanac Rd @ Dawson Rd					
Control Type	Signalized					
Analysis Method	HCM 6th Edition					
Name	Dawson Rd		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Base Volume Input [veh/h]	0	2	377	1	3	332
Total Analysis Volume [veh/h]	58	9	587	223	36	555

Intersection Settings

Cycle Length [s]	70					
Coordination Type	Time of Day Pattern Coordinated					
Actuation Type	Fully actuated					
Lost time [s]	0.00					
Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	8	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lag	-	-	-	Lead	-
Minimum Green [s]	5	0	5	0	5	5
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.2	0.0	3.2	0.0	3.0	4.7
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	20	0	41	0	9	50
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	10	0	10	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Pedestrian Signal Group	0					
Pedestrian Walk [s]	0					
Pedestrian Clearance [s]	0					

Lane Group Calculations

g / C, Green / Cycle	0.07	0.56	0.04	0.67
(v / s)_i Volume / Saturation Flow Rate	0.04	0.50	0.02	0.33
so, Base Saturation Flow per Lane [pc/h/ln]	1900	1900	1900	1900
Arrival type	3	3	3	
s, saturation flow rate [veh/h]	1577	1605	1603	1683
c, Capacity [veh/h]	107	897	68	1124
X, volume / capacity	0.63	0.90	0.53	0.49
d, Delay for Lane Group [s/veh]	22.91	13.18	23.90	3.42
Lane Group LOS	C	B	C	A
Critical Lane Group	Yes	Yes	Yes	No

50th-Percentile Queue Length [veh/ln]	0.65	2.74	0.35	0.11
50th-Percentile Queue Length [ft/ln]	16.26	68.42	8.63	2.63
95th-Percentile Queue Length [veh/ln]	1.17	4.93	0.62	0.19
95th-Percentile Queue Length [ft/ln]	29.27	123.16	15.54	4.74

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	22.91	22.91	13.18	13.18	23.90	3.42
Movement LOS	C	C	B	B	C	A
Critical Movement	No	No	No	No	Yes	No
d_A, Approach Delay [s/veh]	22.91		13.18		4.67	
Approach LOS	C		B		A	
d_I, Intersection Delay [s/veh]	10.20					
Intersection LOS	B					
Intersection V/C	0.570					

Option 1: Copy of Ethanac Rd @ Dawson Rd

Number	12					
Intersection	Ethanac Rd @ Dawson Rd					
Control Type	Signalized					
Analysis Method	HCM 6th Edition					
Name	Dawson Rd		Ethanac Rd		Ethanac Rd	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Base Volume Input [veh/h]	0	1	351	2	3	240
Total Analysis Volume [veh/h]	245	38	750	159	26	601

Intersection Settings

Cycle Length [s]	65					
Coordination Type	Time of Day Pattern Coordinated					
Actuation Type	Fully actuated					
Lost time [s]	0.00					
Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	8	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lag	-	-	-	Lead	-
Minimum Green [s]	5	0	5	0	5	5
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.2	0.0	3.2	0.0	3.0	4.7
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	20	0	35	0	10	45
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	10	0	10	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Pedestrian Signal Group	0					
Pedestrian Walk [s]	0					
Pedestrian Clearance [s]	0					

Lane Group Calculations

g / C, Green / Cycle	0.22	0.53	0.03	0.61
(v / s)_i Volume / Saturation Flow Rate	0.18	0.56	0.02	0.36
so, Base Saturation Flow per Lane [pc/h/ln]	1900	1900	1900	1900
Arrival type	3	3	3	
s, saturation flow rate [veh/h]	1577	1633	1603	1683
c, Capacity [veh/h]	343	868	50	1022
X, volume / capacity	0.82	1.05	0.52	0.59
d, Delay for Lane Group [s/veh]	26.07	56.29	35.16	7.70
Lane Group LOS	C	F	D	A
Critical Lane Group	Yes	Yes	Yes	No

50th-Percentile Queue Length [veh/ln]	3.71	16.91	0.41	2.46
50th-Percentile Queue Length [ft/ln]	92.74	422.63	10.36	61.42
95th-Percentile Queue Length [veh/ln]	6.68	24.48	0.75	4.42
95th-Percentile Queue Length [ft/ln]	166.93	612.12	18.65	110.55

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	26.07	26.07	56.29	56.29	35.16	7.70
Movement LOS	C	C	E	E	D	A
Critical Movement	No	No	Yes	No	No	No
d_A, Approach Delay [s/veh]	26.07		56.29		8.84	
Approach LOS	C		E		A	
d_I, Intersection Delay [s/veh]	35.23					
Intersection LOS	D					
Intersection V/C	0.752					

Option 1: Copy of Ethanac Rd @ Antelope Rd

Number	13											
Intersection	Ethanac Rd @ Antelope Rd											
Control Type	Two-way stop											
Analysis Method	HCM 6th Edition											
Name	Antelope Rd			Ethanac Rd			Matthews Rd			Antelope Rd		
Approach	Northbound			Eastbound			Westbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Base Volume Input [veh/h]	33	0	15	1	304	13	7	207	8	14	0	0
Total Analysis Volume [veh/h]	40	0	19	1	711	17	8	570	9	18	0	0

Intersection Settings

Priority Scheme	Stop	Free	Free	Stop
Flared Lane	No			No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	Yes			Yes
Number of Storage Spaces in Median	2	0	0	2

Capacity Analysis

Calculated Rank	4	3	2	2	1	1	2	1	1	4	3	2
v_c, Conflicting Flow Rate	1304	1308	711	579	0	0	728	0	0	1322	1321	575
v_c, Stage 1	713	713	711	579	0	0	728	0	0	591	591	575
v_c, Stage 2	591	595	0	0	0	0	0	0	0	731	730	0
c_p,x, Potential Capacity [veh/h]	137	159	433	995	0	0	876	0	0	134	157	518
c_p,x, Stage 1 [veh/h]	423	435	1473	1924	0	0	2006	0	0	494	495	1393
c_p,x, Stage 2 [veh/h]	494	492	1085	1623	0	0	1623	0	0	413	428	1085
c_m,x, Movement Capacity [veh/h]	136	157	433	995	100000	100000	876	100000	100000	126	154	518
c_m,x, Stage 1 [veh/h]	422	435	0	0	0	0	0	0	0	487	488	0
c_m,x, Stage 2 [veh/h]	488	486	0	0	0	0	0	0	0	395	427	0
c_T, Total Capacity [veh/h]	328	339	433	995	100000	100000	876	100000	100000	310	332	518

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.12	0.00	0.04	0.00	0.01	0.00	0.01	0.01	0.00	0.06	0.00	0.00
d_M, Delay for Movement [s/veh]	17.98	17.63	15.32	8.62	0.00	0.00	9.15	0.00	0.00	17.35	16.55	12.67
Movement LOS	C	C	C	A	A	A	A	A	A	C	C	B
Critical Movement	Yes		No	No	No	No	No	No	No	No		
95th-Percentile Queue Length [veh/ln]	0.59	0.59	0.59	0.00	0.00	0.00	0.03	0.03	0.03	0.18	0.18	0.18
95th-Percentile Queue Length [ft/ln]	14.68	14.68	14.68	0.08	0.08	0.00	0.69	0.69	0.69	4.61	4.61	4.61
d_A, Approach Delay [s/veh]	17.12			0.01			0.12			17.35		
Approach LOS	C			A			A			C		
V/C_I, Worst Movement V/C Ratio	0.12											
d_I, Worst Movement Control Delay [s/veh]	17.98											
d_I, Intersection Delay [s/veh]	1.01											
Intersection LOS	C											

Option 1: Copy of SR-74 @ Menifee Rd

Number	15											
Intersection	SR-74 @ Menifee Rd											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	Menifee Rd			Menifee Rd			SR-74			SR-74		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Base Volume Input [veh/h]	123	212	359	114	210	25	98	897	189	251	1050	142
Total Analysis Volume [veh/h]	145	248	507	134	246	81	155	1078	222	343	1299	167

Intersection Settings

Cycle Length [s]	90											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Fully actuated											
Lost time [s]	12.00											
Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	5	5	5	0	5	5	0	5	5	0
Maximum Green [s]	30	30	30	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	3.0	3.0	3.9	0.0	3.0	4.7	0.0	3.0	4.7	0.0
All red [s]	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	12	22	22	12	22	0	13	42	0	14	43	0
Walk [s]	0	5	5	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	10	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No	No	No	No		No	No		No	No	
Maximum Recall	No	No	No	No	No		No	No		No	No	
Pedestrian Recall	No	No	No	No	No		No	No		No	No	
Pedestrian Signal Group	0											
Pedestrian Walk [s]	0											
Pedestrian Clearance [s]	0											

Lane Group Calculations

g / C, Green / Cycle	0.09	0.20	0.36	0.09	0.19	0.10	0.40	0.40	0.11	0.41	0.41	
(v / s)_i Volume / Saturation Flow Rate	0.08	0.13	0.32	0.08	0.18	0.09	0.36	0.36	0.10	0.39	0.41	
so, Base Saturation Flow per Lane [pc/h/ln]	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Arrival type	3			3			3			3		
s, saturation flow rate [veh/h]	1781	1870	1589	1781	1792	1781	1870	1761	3459	1870	1797	
c, Capacity [veh/h]	158	373	568	158	340	181	751	707	392	773	743	
X, volume / capacity	0.92	0.66	0.89	0.85	0.96	0.86	0.89	0.90	0.88	0.95	0.98	
d, Delay for Lane Group [s/veh]	58.74	35.28	43.79	51.97	51.59	50.72	39.45	41.69	45.55	48.42	54.94	
Lane Group LOS	E	D	D	D	D	D	D	D	D	D	D	
Critical Lane Group	No	No	Yes	Yes	No	Yes	No	No	No	No	Yes	

50th-Percentile Queue Length [veh/ln]	3.86	4.98	12.09	3.33	8.22	3.72	14.52	14.32	3.84	18.12	19.29
50th-Percentile Queue Length [ft/ln]	96.59	124.43	302.30	83.16	205.58	93.05	362.89	357.96	96.10	452.98	482.20
95th-Percentile Queue Length [veh/ln]	6.95	8.64	17.80	5.99	12.93	6.70	20.76	20.52	6.92	25.10	26.49
95th-Percentile Queue Length [ft/ln]	173.86	215.90	444.88	149.68	323.15	167.49	519.09	513.10	172.98	627.51	662.26

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	58.74	35.28	43.79	51.97	51.59	51.59	50.72	40.31	41.69	45.55	51.25	54.94
Movement LOS	E	D	D	D	D	D	D	D	D	D	D	D
Critical Movement	Yes	No	No	No	No	No	No	No	No	No	No	No
d_A, Approach Delay [s/veh]	43.85			51.70			41.63			50.51		
Approach LOS	D			D			D			D		
d_I, Intersection Delay [s/veh]	46.54											
Intersection LOS	D											
Intersection V/C	0.937											

Option 1: Copy of SR-74 @ Menifee Rd

Number	15											
Intersection	SR-74 @ Menifee Rd											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	Menifee Rd			Menifee Rd			SR-74			SR-74		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Base Volume Input [veh/h]	82	158	283	101	175	20	45	1080	102	229	888	93
Total Analysis Volume [veh/h]	94	181	476	116	201	75	111	1310	117	440	1071	107

Intersection Settings

Cycle Length [s]	90											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Fully actuated											
Lost time [s]	12.00											
Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	6	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups			6,7									
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	5	5	5	0	5	5	0	5	5	0
Maximum Green [s]	30	30	30	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	3.0	3.0	3.9	0.0	3.0	4.7	0.0	3.0	4.7	0.0
All red [s]	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	11	19	19	12	20	0	23	43	0	16	36	0
Walk [s]	0	5	5	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	10	0	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No	No	No	No		No	No		No	No	
Maximum Recall	No	No	No	No	No		No	No		No	No	
Pedestrian Recall	No	No	No	No	No		No	No		No	No	
Pedestrian Signal Group	0											
Pedestrian Walk [s]	0											
Pedestrian Clearance [s]	0											

Lane Group Calculations

g / C, Green / Cycle	0.07	0.17	0.35	0.08	0.17	0.08	0.41	0.41	0.14	0.47	0.47	
(v / s)_i Volume / Saturation Flow Rate	0.05	0.10	0.30	0.07	0.15	0.06	0.39	0.39	0.13	0.32	0.32	
so, Base Saturation Flow per Lane [pc/h/ln]	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Arrival type	3			3			3			3		
s, saturation flow rate [veh/h]	1781	1870	1589	1781	1784	1781	1870	1817	3459	1870	1811	
c, Capacity [veh/h]	120	316	562	146	309	142	771	750	485	884	856	
X, volume / capacity	0.78	0.57	0.85	0.80	0.89	0.78	0.93	0.94	0.91	0.67	0.68	
d, Delay for Lane Group [s/veh]	51.91	36.05	38.30	50.11	45.19	49.54	45.04	46.97	44.93	22.40	22.83	
Lane Group LOS	D	D	D	D	D	D	D	D	D	C	C	
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	Yes	No	No	

50th-Percentile Queue Length [veh/ln]	2.34	3.64	10.52	2.82	6.41	2.63	16.98	17.06	4.93	9.18	9.13
50th-Percentile Queue Length [ft/ln]	58.39	90.94	262.90	70.49	160.35	65.66	424.43	426.49	123.18	229.45	228.15
95th-Percentile Queue Length [veh/ln]	4.20	6.55	15.83	5.07	10.57	4.73	23.73	23.83	8.57	14.15	14.08
95th-Percentile Queue Length [ft/ln]	105.11	163.69	395.85	126.87	264.19	118.19	593.37	595.83	214.19	353.66	352.00

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	51.91	36.05	38.30	50.11	45.19	45.19	49.54	45.91	46.97	44.93	22.59	22.83
Movement LOS	D	D	D	D	D	D	D	D	D	D	C	C
Critical Movement	Yes	No	No	No	No	No	No	No	No	No	No	No
d_A, Approach Delay [s/veh]	39.46			46.65			46.25			28.68		
Approach LOS	D			D			D			C		
d_I, Intersection Delay [s/veh]	38.49											
Intersection LOS	D											
Intersection V/C	0.917											

Option 1: Copy of SR-74 @ Briggs Rd

Number	16											
Intersection	SR-74 @ Briggs Rd											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	Briggs Rd			Briggs Rd			SR-74			SR-74		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Base Volume Input [veh/h]	474	218	132	222	200	103	106	595	605	235	894	162
Total Analysis Volume [veh/h]	691	284	171	288	259	144	140	793	886	305	1201	209

Intersection Settings

Cycle Length [s]	115											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Fully actuated											
Lost time [s]	0.00											
Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	8	7	4	0
Auxiliary Signal Groups									1,8			
Lead / Lag	Lag	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	5	5	5	0
Maximum Green [s]	30	30	0	30	30	0	30	30	30	30	30	0
Amber [s]	3.0	4.3	0.0	3.0	4.3	0.0	3.0	4.7	4.7	3.0	4.7	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	27	25	0	24	22	0	14	36	36	30	52	0
Walk [s]	5	5	0	0	5	0	0	5	5	0	5	0
Pedestrian Clearance [s]	10	10	0	0	10	0	0	10	10	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No	No	No	No	
Maximum Recall	No	No		No	No		No	No	No	No	No	
Pedestrian Recall	No	No		No	No		No	No	No	No	No	
Pedestrian Signal Group	0											
Pedestrian Walk [s]	0											
Pedestrian Clearance [s]	0											

Lane Group Calculations




g / C, Green / Cycle	0.20	0.17	0.17	0.17	0.15	0.15	0.09	0.30	0.74	0.19	0.40	0.40
(v / s)_i Volume / Saturation Flow Rate	0.20	0.15	0.11	0.16	0.14	0.09	0.08	0.22	0.56	0.17	0.38	0.39
so, Base Saturation Flow per Lane [pc/h/ln]	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Arrival type	3			3			3			3		
s, saturation flow rate [veh/h]	3459	1870	1589	1781	1870	1589	1781	3560	1589	1781	1870	1776
c, Capacity [veh/h]	688	319	271	310	272	231	159	1077	1180	335	750	712
X, volume / capacity	1.00	0.89	0.63	0.93	0.95	0.62	0.88	0.74	0.75	0.91	0.95	0.98
d, Delay for Lane Group [s/veh]	62.89	56.49	46.78	63.92	65.16	48.94	65.89	40.51	13.04	61.43	56.09	62.92
Lane Group LOS	F	E	D	E	E	D	E	D	B	E	E	E
Critical Lane Group	Yes	No	No	No	Yes	No	No	No	Yes	Yes	No	No

50th-Percentile Queue Length [veh/ln]	11.07	8.55	4.58	9.31	8.38	3.94	4.47	10.11	10.33	9.61	22.39	23.33
50th-Percentile Queue Length [ft/ln]	276.71	213.66	114.38	232.86	209.38	98.39	111.83	252.83	258.28	240.23	559.79	583.13
95th-Percentile Queue Length [veh/ln]	16.56	13.34	8.08	14.32	13.12	7.08	7.94	15.33	15.60	14.69	30.15	31.25
95th-Percentile Queue Length [ft/ln]	413.92	333.52	202.08	357.99	328.04	177.10	198.54	383.21	390.07	367.33	753.80	781.14

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	62.89	56.49	46.78	63.92	65.16	48.94	65.89	40.51	13.04	61.43	58.86	62.92
Movement LOS	F	E	D	E	E	D	E	D	B	E	E	E
Critical Movement	No	No	No	No	No	No	Yes	No	No	No	No	No
d_A, Approach Delay [s/veh]	58.90			61.27			29.08			59.81		
Approach LOS	E			E			C			E		
d_I, Intersection Delay [s/veh]	49.40											
Intersection LOS	D											
Intersection V/C	0.946											

Option 1: Copy of Matthews Rd @ Palomar Rd

Number	17					
Intersection	Matthews Rd @ Palomar Rd					
Control Type	Signalized					
Analysis Method	HCM 6th Edition					
Name	Palomar Rd		Matthews Rd		Matthews Rd	
Approach	Southbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Base Volume Input [veh/h]	51	173	202	128	274	150
Total Analysis Volume [veh/h]	58	312	305	145	366	261

Intersection Settings

Cycle Length [s]	75					
Coordination Type	Time of Day Pattern Coordinated					
Actuation Type	Fully actuated					
Lost time [s]	0.00					
Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	4	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	5	0	5	5
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	23	0	28	0	24	52
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	10	0	10	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Pedestrian Signal Group	0					
Pedestrian Walk [s]	0					
Pedestrian Clearance [s]	0					

Lane Group Calculations

g / C, Green / Cycle	0.25	0.25	0.31	0.26	0.63
(v / s)_i Volume / Saturation Flow Rate	0.04	0.22	0.28	0.23	0.16
so, Base Saturation Flow per Lane [pc/h/ln]	1900	1900	1900	1900	1900
Arrival type	3		3	3	
s, saturation flow rate [veh/h]	1603	1431	1592	1603	1683
c, Capacity [veh/h]	403	360	499	416	1063
X, volume / capacity	0.14	0.87	0.90	0.88	0.25
d, Delay for Lane Group [s/veh]	20.04	30.91	32.68	30.37	5.61
Lane Group LOS	C	C	C	C	A
Critical Lane Group	No	Yes	Yes	Yes	No

50th-Percentile Queue Length [veh/ln]	0.67	4.97	7.20	5.56	1.02
50th-Percentile Queue Length [ft/ln]	16.79	124.29	180.06	139.07	25.54
95th-Percentile Queue Length [veh/ln]	1.21	8.63	11.60	9.43	1.84
95th-Percentile Queue Length [ft/ln]	30.22	215.71	290.09	235.77	45.96

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	20.04	30.91	32.68	32.68	30.37	5.61
Movement LOS	C	C	C	C	C	A
Critical Movement	No	No	Yes	No	No	No
d_A, Approach Delay [s/veh]	29.21		32.68		20.06	
Approach LOS	C		C		C	
d_I, Intersection Delay [s/veh]	26.32					
Intersection LOS	C					
Intersection V/C	0.729					

Option 1: Copy of Matthews Rd @ Palomar Rd

Number	17					
Intersection	Matthews Rd @ Palomar Rd					
Control Type	Signalized					
Analysis Method	HCM 6th Edition					
Name	Palomar Rd		Matthews Rd		Matthews Rd	
Approach	Southbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Base Volume Input [veh/h]	38	158	66	62	219	121
Total Analysis Volume [veh/h]	43	270	266	69	373	314

Intersection Settings

Cycle Length [s]	70					
Coordination Type	Time of Day Pattern Coordinated					
Actuation Type	Fully actuated					
Lost time [s]	0.00					
Control Type	Permissive	Permissive	Permissive	Permissive	Protected	Permissive
Signal Group	4	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	5	0	5	5
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.9	0.0	4.7	0.0	3.0	4.7
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	22	0	24	0	24	48
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	10	0	10	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Pedestrian Signal Group	0					
Pedestrian Walk [s]	0					
Pedestrian Clearance [s]	0					

Lane Group Calculations

g / C, Green / Cycle	0.23	0.23	0.24	0.27	0.59
(v / s)_i Volume / Saturation Flow Rate	0.03	0.19	0.21	0.23	0.19
so, Base Saturation Flow per Lane [pc/h/ln]	1900	1900	1900	1900	1900
Arrival type	3		3	3	
s, saturation flow rate [veh/h]	1603	1431	1624	1603	1683
c, Capacity [veh/h]	365	326	396	434	985
X, volume / capacity	0.12	0.83	0.85	0.86	0.32
d, Delay for Lane Group [s/veh]	17.53	26.25	25.44	24.71	6.18
Lane Group LOS	B	C	C	C	A
Critical Lane Group	No	Yes	Yes	Yes	No

50th-Percentile Queue Length [veh/ln]	0.40	3.42	3.97	4.34	1.11
50th-Percentile Queue Length [ft/ln]	10.10	85.52	99.27	108.58	27.64
95th-Percentile Queue Length [veh/ln]	0.73	6.16	7.15	7.76	1.99
95th-Percentile Queue Length [ft/ln]	18.17	153.94	178.69	194.03	49.75

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	17.53	26.25	25.44	25.44	24.71	6.18
Movement LOS	B	C	C	C	C	A
Critical Movement	No	Yes	No	No	No	No
d_A, Approach Delay [s/veh]	25.05		25.44		16.24	
Approach LOS	C		C		B	
d_I, Intersection Delay [s/veh]	20.61					
Intersection LOS	C					
Intersection V/C	0.628					

Option 1: Copy of Rouse Rd @ Murrieta Rd

Number	22											
Intersection	Rouse Rd @ Murrieta Rd											
Control Type	All-way stop											
Analysis Method	HCM 6th Edition											
Name	Murrieta Rd			Murrieta Rd			Rouse Rd			Rouse Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Base Volume Input [veh/h]	6	254	18	33	289	13	11	11	3	11	11	48
Total Analysis Volume [veh/h]	9	422	27	70	483	30	23	17	4	17	17	84

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	513	553	618	527	568	639	421	447	491	428	456	502
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Movement, Approach, & Intersection Results

Average Lane Delay [s/veh]	9.84	27.25	8.79	10.57	34.91	8.61	11.75	11.07	10.10	11.45	10.90	11.32
95th-Percentile Queue Length [veh]	0.05	6.84	0.14	0.46	9.14	0.15	0.17	0.12	0.02	0.12	0.12	0.60
95th-Percentile Queue Length [ft]	1.34	170.99	3.42	11.40	228.43	3.69	4.32	2.96	0.62	3.09	2.90	14.92
Approach Delay [s/veh]	25.82			30.64			11.34			11.28		
Approach LOS	D			D			B			B		
Intersection Delay [s/veh]	26.20											
Intersection LOS	D											

Option 1: Copy of McCall Blvd @ I-215 SB

Number	25											
Intersection	McCall Blvd @ I-215 SB											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name				I-215 SB			McCall Blvd			McCall Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Base Volume Input [veh/h]	0	0	0	324	1	490	0	895	293	289	858	0
Total Analysis Volume [veh/h]	0	0	0	560	1	564	0	1152	336	474	1100	0

Intersection Settings

Cycle Length [s]	75											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Fully actuated											
Lost time [s]	8.00											
Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	5	0	0	5	0	5	5	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	3.2	0.0	0.0	3.6	0.0	3.0	3.6	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	34	0	0	31	0	10	41	0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	24	0	0	21	0	0	15	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall					No			No		No	No	
Maximum Recall					No			No		No	No	
Pedestrian Recall					No			No		No	No	
Pedestrian Signal Group	0											
Pedestrian Walk [s]	0											
Pedestrian Clearance [s]	0											

Lane Group Calculations

g / C, Green / Cycle		0.27	0.27	0.27	0.31	0.31	0.28	0.64
(v / s)_i Volume / Saturation Flow Rate		0.21	0.22	0.24	0.32	0.21	0.27	0.31
so, Base Saturation Flow per Lane [pc/h/ln]		1900	1900	1900	1900	1900	1900	1900
Arrival type	3	3			3		3	
s, saturation flow rate [veh/h]		1781	1679	1589	3560	1589	1781	3560
c, Capacity [veh/h]		476	448	424	1121	500	506	2281
X, volume / capacity		0.79	0.84	0.88	1.03	0.67	0.94	0.48
d, Delay for Lane Group [s/veh]		37.89	41.56	46.98	53.11	31.27	54.04	9.07
Lane Group LOS		D	D	D	F	C	D	A
Critical Lane Group		No	No	Yes	Yes	No	Yes	No

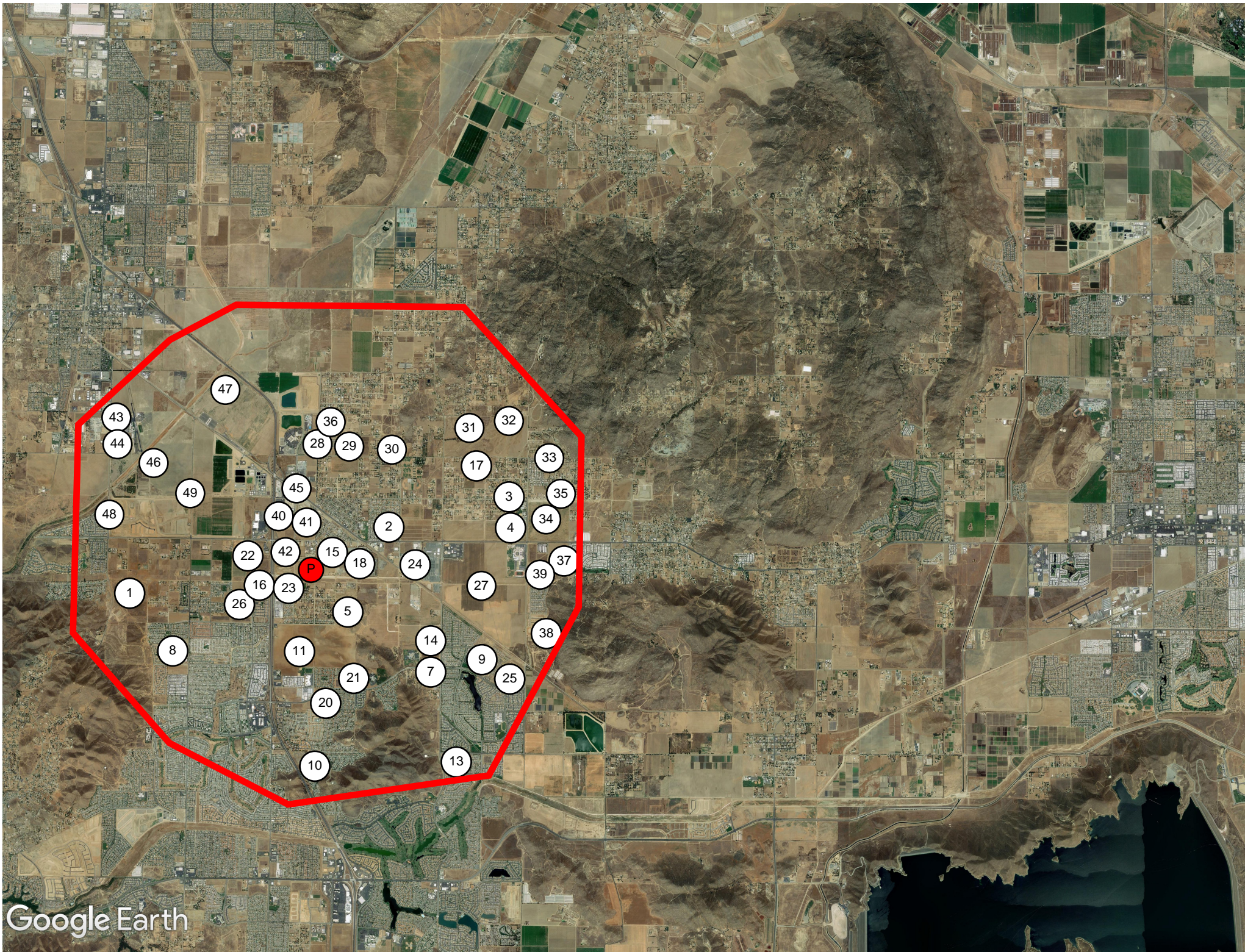
50th-Percentile Queue Length [veh/ln]		8.58	9.06	9.71	15.51	6.82	13.16	5.16
50th-Percentile Queue Length [ft/ln]		214.48	226.45	242.68	387.65	170.58	329.01	129.03
95th-Percentile Queue Length [veh/ln]		13.38	13.99	14.82	22.35	11.11	19.11	8.89
95th-Percentile Queue Length [ft/ln]		334.57	349.84	370.43	558.83	277.68	477.75	222.18

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	39.10	41.56	45.16	0.00	53.11	31.27	54.04	9.07	0.00
Movement LOS				D	D	D		F	C	D	A	
Critical Movement				No	No	No		No	No	Yes	No	
d_A, Approach Delay [s/veh]	0.00			42.14			48.18			22.61		
Approach LOS	A			D			D			C		
d_I, Intersection Delay [s/veh]	36.94											
Intersection LOS	D											
Intersection V/C	0.901											

Appendix E

Cumulative Project Information



Cumulative Project Trip Generation

Project	Land Use	Size ¹	Trip Generation ²			
			Daily	AM Peak Hr	PM Peak Hr	
City of Menifee						
1 TTM 31856	Single Family Residential	79 DU	746	58	78	
2 TTM 34118	Single Family Residential	85 DU	802	63	84	
3 TTM 33738	Single Family Residential	52 DU	491	38	51	
4 TTM 34600	Multi Family Residential	153 DU	1,444	113	151	
5 TTM 29777	Single Family Residential	173 DU	1,633	128	171	
6 TTM 29835	Single Family Residential	264 DU	2,492	195	261	
7 CUP 3549 / 2017-089	Supermarket	43.8 TSF	4,677	167	405	
	Retail	47 TSF	1,774	44	179	
	Fast Food w. Drive-Thru	3.8 TSF	1,790	153	124	
	Gas Station w. Convenience Store	6 VFP	1,232	75	84	
	Automated Car Wash	1 CWT	780	-	78	
	<i>Internal Capture (10%)</i>			-1,025	-44	-87
	<i>Supermarket Pass-by (PM 36%)</i>			-	-	-131
	<i>Gas Station Pass-by (AM 62%, PM 59%)</i>			-	-42	-45
	<i>Retail Pass-by (PM 34%)</i>			-	-	-55
	<i>Fast Food Pass-by (AM 49%, PM 50%)</i>			-	-67	-56
	<i>Total</i>			9,228	286	497
8 TTM 31456	Single Family Residential	177 DU	1,671	131	175	
9 TTM 34406	Single Family Residential	817 DU	7,712	605	809	
10 PP 19469	Single Family Residential	221 DU	2,086	164	219	
11 SP 2009-025	Single Family Residential	1,080 DU	10,148	796	1,064	
	Shopping Center	225 TSF	8,494	212	857	
	<i>Internal Capture (10%)</i>			-1,864	-101	-192
	<i>Retail Pass-by (PM 34%)</i>			-	-	-262
<i>Total</i>			16,778	907	1,467	
12 2012-120	Shopping Center	208 TSF	7,852	196	792	
	<i>Retail Pass-by (PM 34%)</i>			-	-	-242
	<i>Total</i>			7,852	196	792
13 TM 31582	Single Family Residential	40 DU	378	30	40	
14 PP 2014-189	Single Family Residential	240 DU	2,266	178	238	
15 PP 2011-093	Light Industrial	97.5 TSF	329	39	39	
16 TR 2015-250	Single Family Residential	126 DU	1,189	93	125	
17 TR 31536	Single Family Residential	44 DU	415	33	33	
18 2011-003	Light Industrial	21.7 TSF	73	9	9	
19 2016-110 CUP	Fast Food w. Drive-Thru	2.4 TSF	1,130	96	78	
	<i>Fast Food Pass-by (AM 49%, PM 50%)</i>			-565	-48	-39
	<i>Total</i>			565	48	39

¹ CWT = Car Wash Tunnel; TSF =Thousand Square Feet; VFP = Vehicle Fueling Positions; DU = Dwelling Unit

² Trip generation based on ITE Trip Generation Manual 10th Edition

Cumulative Project Trip Generation

Project	Land Use	Size ¹	Trip Generation ²		
			Daily	AM Peak Hr	PM Peak Hr
City of Menifee (cont.)					
20 PP 2016-124	Shopping Center	18.2 TSF	687	17	69
	<i>Retail Pass-by (PM 34%)</i>		-	-	-23
	<i>Total</i>		687	17	46
21 2016-183 CUP	Assisted Living	45.2 TSF	189	18	22
22 CUP 2017-060	Gas Station w. Convenience Store	16 VFP	3,286	200	224
	Car Wash	2 CWT	-	-	155
	Fast Food w. Drive-Thru	4.3 TSF	2,025	173	140
	<i>Internal Capture (10%)</i>		-531	-37	-52
	<i>Gas Station Pass-by (AM 62%, PM 59%)</i>		-	-112	-119
	<i>Fast Food Pass-by (AM 49%, PM 50%)</i>		-	-76	-63
	<i>Total</i>		4,780	148	285
23 2016-233 CUP	Automobile Sales	17.6 TSF	490	33	43
24 CUP 2016-263	Light Industrial	12.3 TSF	61	9	8
25 2016-139 TR (Heritage Lake SP)	Single Family Residential	40 DU	378	30	40
26 TR 37400/2018-065	Single Family Residential	174 DU	1,643	129	172
27 Menifee Valley SP			24,346	1,948	2,316
County of Riverside					
28 TR25901	Single Family Residential	152 DU	1,435	112	150
29 TTM 37358	Single Family Residential	154 DU	1,454	114	152
30 TR31687	Single Family Residential	65 DU	614	48	64
31 TR35045	Single Family Residential	712 DU	6,721	527	705
32 SP00344	Single Family Residential	796 DU	7,514	589	583
33 TR24936	Single Family Residential	41 DU	387	30	41
34 TR29322	Single Family Residential	202 DU	1907	149	200
35 TTM37533	Single Family Residential	363 DU	3,427	269	359
36 TR37728	Single Family Residential	234 DU	2,209	173	232
37 TR30972	Single Family Residential	91 DU	859	67	90
38 TR36430	Single Family Residential	340 DU	3,210	252	337
39 SP360A3	Residential		4,063	249	306

¹ CWT = Car Wash Tunnel; TSF =Thousand Square Feet; VFP = Vehicle Fueling Positions; DU = Dwelling Unit

² Trip generation based on ITE Trip Generation Manual 10th Edition

Cumulative Project Trip Generation

Project	Land Use	Size ¹	Trip Generation ²		
			Daily	AM Peak Hr	PM Peak Hr
City of Perris					
40 Classic Pacific (PUD)	Industrial Park	388 TSF	1,307	155	155
41 Quick Quick Carwash	Car Wash	4 TSF	-	-	42
42 Motte Town Center	Retail	484 TSF	18,271	455	1,844
	<i>Retail Pass-by (PM 34%)</i>		-	-	-627
	<i>Total</i>		<i>18,271</i>	<i>455</i>	<i>1,217</i>
43 IDI Site 1	Warehouse	784 TSF	1,088	63	78
44 IDI Site 2	Warehouse	3,449 TSF	2,564	362	326
45 Marijuana Manufacturing	Manufacturing	12 TSF	3,032	125	262
46 Tract 32666 WSI Mojave Inc	Single Family Residential	665 DU	6,278	492	658
47 Tract 33973 County Lands PIP IV	Single Family Residential	384 DU	3,625	284	380
48 Green Valley SP Tract 37223	Single Family Residential	258 DU	2,436	191	255
49 Green Valley SP Tract 37262	Single Family Residential	212 DU	2,001	157	210

¹ TSF =Thousand Square Feet; VFP = Vehicle Fueling Positions; DU = Dwelling Unit

² Trip generation based on ITE Trip Generation Manual 10th Edition

Appendix F

Freeway Analysis Worksheets

Appendix F-1

Existing Conditions (2021)

HCS7 Freeway Diverge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 NB @ Ethanac Rd	Analysis Year	Existing (2021)
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (L _D), ft	7300	920
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	3985	424
Peak Hour Factor (PHF)	0.95	0.98
Total Trucks, %	1.83	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.982	1.000
Flow Rate (v _i), pc/h	4285	433
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.60	0.22

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	0.0	Density in Ramp Influence Area (D _R), pc/mi/ln	20.7
Distance to Upstream Ramp (L _{UP}), ft	7300	Speed Index (D _S)	0.467
Downstream Equilibrium Distance (L _{EQ}), ft	-	Flow Outer Lanes (v _{OA}), pc/h/ln	1414
Distance to Downstream Ramp (L _{DOWN}), ft	2670	Off-Ramp Influence Area Speed (S _R), mi/h	59.8
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FD})	0.633	Outer Lanes Freeway Speed (S _O), mi/h	81.1
Flow in Lanes 1 and 2 (v ₁₂), pc/h	2871	Ramp Junction Speed (S), mi/h	65.5
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	-	Average Density (D), pc/mi/ln	21.8
Level of Service (LOS)	C		

HCS7 Freeway Diverge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 NB @ Ethanac Rd	Analysis Year	Existing (2021)
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (L _D), ft	7300	920
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	5185	611
Peak Hour Factor (PHF)	0.89	0.94
Total Trucks, %	1.51	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.985	1.000
Flow Rate (v _i), pc/h	5915	650
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.82	0.32

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	0.0	Density in Ramp Influence Area (D _R), pc/mi/ln	27.9
Distance to Upstream Ramp (L _{UP}), ft	7300	Speed Index (D _S)	0.487
Downstream Equilibrium Distance (L _{EQ}), ft	-	Flow Outer Lanes (v _{OA}), pc/h/ln	2201
Distance to Downstream Ramp (L _{DOWN}), ft	2670	Off-Ramp Influence Area Speed (S _R), mi/h	59.1
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FD})	0.582	Outer Lanes Freeway Speed (S _O), mi/h	78.0
Flow in Lanes 1 and 2 (v ₁₂), pc/h	3714	Ramp Junction Speed (S), mi/h	65.0
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	-	Average Density (D), pc/mi/ln	30.3
Level of Service (LOS)	C		

HCS7 Freeway Merge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 NB @ Ethanac	Analysis Year	Existing (2021)
Jurisdiction	Caltrans District 8	Time Period Analyzed	AM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (L _A), ft	2670	920
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	3577	280
Peak Hour Factor (PHF)	0.95	0.98
Total Trucks, %	1.83	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.982	1.000
Flow Rate (v _i), pc/h	3834	286
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.57	0.14

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	718.4	Density in Ramp Influence Area (D _R), pc/mi/ln	20.2
Distance to Upstream Ramp (L _{UP}), ft	2670	Speed Index (M _s)	0.311
Downstream Equilibrium Distance (L _{EQ}), ft	2976.1	Flow Outer Lanes (v _{OA}), pc/h/ln	1484
Distance to Downstream Ramp (L _{DOWN}), ft	2550	On-Ramp Influence Area Speed (S _R), mi/h	65.0
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FM})	0.613	Outer Lanes Freeway Speed (S _O), mi/h	71.9
Flow in Lanes 1 and 2 (v ₁₂), pc/h	2350	Ramp Junction Speed (S), mi/h	67.3
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	2636	Average Density (D), pc/mi/ln	20.4
Level of Service (LOS)	C		

HCS7 Freeway Merge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 NB @ Ethanac	Analysis Year	Existing (2021)
Jurisdiction	Caltrans District 8	Time Period Analyzed	PM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (L _A), ft	2670	920
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	4597	400
Peak Hour Factor (PHF)	0.89	0.94
Total Trucks, %	1.51	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.985	1.000
Flow Rate (v _i), pc/h	5244	426
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.79	0.21

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	1050.1	Density in Ramp Influence Area (D _R), pc/mi/ln	27.6
Distance to Upstream Ramp (L _{UP}), ft	2670	Speed Index (M _s)	0.398
Downstream Equilibrium Distance (L _{EQ}), ft	1615.9	Flow Outer Lanes (v _{OA}), pc/h/ln	2082
Distance to Downstream Ramp (L _{DOWN}), ft	2550	On-Ramp Influence Area Speed (S _R), mi/h	62.1
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FM})	0.603	Outer Lanes Freeway Speed (S _O), mi/h	69.7
Flow in Lanes 1 and 2 (v ₁₂), pc/h	3162	Ramp Junction Speed (S), mi/h	64.7
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	3588	Average Density (D), pc/mi/ln	29.2
Level of Service (LOS)	C		

HCS7 Freeway Diverge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 NB @ SR-74	Analysis Year	Existing (2021)
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (L _D), ft	2550	430
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	3847	582
Peak Hour Factor (PHF)	0.95	0.94
Total Trucks, %	1.83	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.982	1.000
Flow Rate (v _i), pc/h	4124	619
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.57	0.31

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	2404.8	Density in Ramp Influence Area (D _R), pc/mi/ln	24.6
Distance to Upstream Ramp (L _{UP}), ft	2550	Speed Index (D _S)	0.484
Downstream Equilibrium Distance (L _{EQ}), ft	-	Flow Outer Lanes (v _{OA}), pc/h/ln	1304
Distance to Downstream Ramp (L _{DOWN}), ft	1570	Off-Ramp Influence Area Speed (S _R), mi/h	59.2
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FD})	0.628	Outer Lanes Freeway Speed (S _O), mi/h	81.5
Flow in Lanes 1 and 2 (v ₁₂), pc/h	2820	Ramp Junction Speed (S), mi/h	64.8
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	-	Average Density (D), pc/mi/ln	21.2
Level of Service (LOS)	C		

HCS7 Freeway Diverge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 NB @ SR-74	Analysis Year	Existing (2021)
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (L _D), ft	2550	430
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	4982	316
Peak Hour Factor (PHF)	0.89	0.94
Total Trucks, %	1.51	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.985	1.000
Flow Rate (v _i), pc/h	5683	336
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.79	0.17

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	2415.4	Density in Ramp Influence Area (D _R), pc/mi/ln	31.0
Distance to Upstream Ramp (L _{UP}), ft	2550	Speed Index (D _S)	0.458
Downstream Equilibrium Distance (L _{EQ}), ft	-	Flow Outer Lanes (v _{OA}), pc/h/ln	2128
Distance to Downstream Ramp (L _{DOWN}), ft	1570	Off-Ramp Influence Area Speed (S _R), mi/h	60.1
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FD})	0.602	Outer Lanes Freeway Speed (S _O), mi/h	78.3
Flow in Lanes 1 and 2 (v ₁₂), pc/h	3555	Ramp Junction Speed (S), mi/h	65.8
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	-	Average Density (D), pc/mi/ln	28.8
Level of Service (LOS)	D		

HCS7 Freeway Merge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 NB @ SR-74	Analysis Year	Existing (2021)
Jurisdiction	Caltrans District 8	Time Period Analyzed	AM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (L _A), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	3276	533
Peak Hour Factor (PHF)	0.95	0.94
Total Trucks, %	1.83	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.982	1.000
Flow Rate (v _i), pc/h	3512	567
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.57	0.28

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	967.1	Density in Ramp Influence Area (D _R), pc/mi/ln	17.3
Distance to Upstream Ramp (L _{UP}), ft	1570	Speed Index (M _s)	0.277
Downstream Equilibrium Distance (L _{EQ}), ft	-	Flow Outer Lanes (v _{OA}), pc/h/ln	1335
Distance to Downstream Ramp (L _{DOWN}), ft	-	On-Ramp Influence Area Speed (S _R), mi/h	66.1
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FM})	0.620	Outer Lanes Freeway Speed (S _O), mi/h	72.4
Flow in Lanes 1 and 2 (v ₁₂), pc/h	2177	Ramp Junction Speed (S), mi/h	68.0
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	2744	Average Density (D), pc/mi/ln	20.0
Level of Service (LOS)	B		

HCS7 Freeway Merge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 NB @ SR-74	Analysis Year	Existing (2021)
Jurisdiction	Caltrans District 8	Time Period Analyzed	PM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (L _A), ft	1570	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	4672	831
Peak Hour Factor (PHF)	0.89	0.94
Total Trucks, %	1.51	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.985	1.000
Flow Rate (v _i), pc/h	5329	884
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.86	0.44

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	1423.8	Density in Ramp Influence Area (D _R), pc/mi/ln	28.4
Distance to Upstream Ramp (L _{UP}), ft	1570	Speed Index (M _s)	0.473
Downstream Equilibrium Distance (L _{EQ}), ft	-	Flow Outer Lanes (v _{OA}), pc/h/ln	2025
Distance to Downstream Ramp (L _{DOWN}), ft	-	On-Ramp Influence Area Speed (S _R), mi/h	59.6
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FM})	0.620	Outer Lanes Freeway Speed (S _O), mi/h	69.9
Flow in Lanes 1 and 2 (v ₁₂), pc/h	3304	Ramp Junction Speed (S), mi/h	62.6
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	4188	Average Density (D), pc/mi/ln	33.1
Level of Service (LOS)	D		

HCS7 Freeway Diverge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 SB @ SR-74	Analysis Year	Existing (2021)
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (L _D), ft	10000	1270
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	4026	703
Peak Hour Factor (PHF)	0.96	0.97
Total Trucks, %	4.15	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.960	1.000
Flow Rate (v _i), pc/h	4368	725
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.61	0.36

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	-	Density in Ramp Influence Area (D _R), pc/mi/ln	18.4
Distance to Upstream Ramp (L _{UP}), ft	-	Speed Index (D _S)	0.493
Downstream Equilibrium Distance (L _{EQ}), ft	-	Flow Outer Lanes (v _{OA}), pc/h/ln	1395
Distance to Downstream Ramp (L _{DOWN}), ft	1360	Off-Ramp Influence Area Speed (S _R), mi/h	58.9
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FD})	0.617	Outer Lanes Freeway Speed (S _O), mi/h	81.2
Flow in Lanes 1 and 2 (v ₁₂), pc/h	2973	Ramp Junction Speed (S), mi/h	64.6
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	-	Average Density (D), pc/mi/ln	22.5
Level of Service (LOS)	B		

HCS7 Freeway Diverge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 SB @ SR-74	Analysis Year	Existing (2021)
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (L _D), ft	10000	1270
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	4408	962
Peak Hour Factor (PHF)	0.98	0.93
Total Trucks, %	4.08	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.961	1.000
Flow Rate (v _i), pc/h	4680	1034
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.65	0.52

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	-	Density in Ramp Influence Area (D _R), pc/mi/ln	20.4
Distance to Upstream Ramp (L _{UP}), ft	-	Speed Index (D _S)	0.521
Downstream Equilibrium Distance (L _{EQ}), ft	-	Flow Outer Lanes (v _{OA}), pc/h/ln	1477
Distance to Downstream Ramp (L _{DOWN}), ft	1360	Off-Ramp Influence Area Speed (S _R), mi/h	58.0
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FD})	0.595	Outer Lanes Freeway Speed (S _O), mi/h	80.9
Flow in Lanes 1 and 2 (v ₁₂), pc/h	3203	Ramp Junction Speed (S), mi/h	63.7
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	-	Average Density (D), pc/mi/ln	24.5
Level of Service (LOS)	C		

HCS7 Freeway Merge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 SB @ SR-74	Analysis Year	Existing (2021)
Jurisdiction	Caltrans District 8	Time Period Analyzed	AM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (L _A), ft	1360	350
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	3336	470
Peak Hour Factor (PHF)	0.96	0.97
Total Trucks, %	4.15	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.960	1.000
Flow Rate (v _i), pc/h	3620	485
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.57	0.24

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	462.1	Density in Ramp Influence Area (D _R), pc/mi/ln	23.5
Distance to Upstream Ramp (L _{UP}), ft	1360	Speed Index (M _s)	0.350
Downstream Equilibrium Distance (L _{EQ}), ft	2281.0	Flow Outer Lanes (v _{OA}), pc/h/ln	1495
Distance to Downstream Ramp (L _{DOWN}), ft	3460	On-Ramp Influence Area Speed (S _R), mi/h	63.7
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FM})	0.587	Outer Lanes Freeway Speed (S _O), mi/h	71.8
Flow in Lanes 1 and 2 (v ₁₂), pc/h	2125	Ramp Junction Speed (S), mi/h	66.4
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	2610	Average Density (D), pc/mi/ln	20.6
Level of Service (LOS)	C		

HCS7 Freeway Merge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 SB @ SR-74	Analysis Year	Existing (2021)
Jurisdiction	Caltrans District 8	Time Period Analyzed	PM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (L _A), ft	1360	350
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	3465	375
Peak Hour Factor (PHF)	0.98	0.93
Total Trucks, %	4.08	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.961	1.000
Flow Rate (v _i), pc/h	3679	403
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.57	0.20

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	457.2	Density in Ramp Influence Area (D _R), pc/mi/ln	23.2
Distance to Upstream Ramp (L _{UP}), ft	1360	Speed Index (M _s)	0.347
Downstream Equilibrium Distance (L _{EQ}), ft	2968.1	Flow Outer Lanes (v _{OA}), pc/h/ln	1519
Distance to Downstream Ramp (L _{DOWN}), ft	3460	On-Ramp Influence Area Speed (S _R), mi/h	63.8
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FM})	0.587	Outer Lanes Freeway Speed (S _O), mi/h	71.7
Flow in Lanes 1 and 2 (v ₁₂), pc/h	2160	Ramp Junction Speed (S), mi/h	66.5
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	2563	Average Density (D), pc/mi/ln	20.5
Level of Service (LOS)	C		

HCS7 Freeway Diverge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 SB @ Ethanac Rd	Analysis Year	Existing (2021)
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (L _D), ft	3460	1030
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	3797	322
Peak Hour Factor (PHF)	0.96	0.96
Total Trucks, %	4.15	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.960	1.000
Flow Rate (v _i), pc/h	4120	335
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.57	0.17

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	3453.6	Density in Ramp Influence Area (D _R), pc/mi/ln	18.8
Distance to Upstream Ramp (L _{UP}), ft	3460	Speed Index (D _S)	0.458
Downstream Equilibrium Distance (L _{EQ}), ft	-	Flow Outer Lanes (v _{OA}), pc/h/ln	1355
Distance to Downstream Ramp (L _{DOWN}), ft	2820	Off-Ramp Influence Area Speed (S _R), mi/h	60.1
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FD})	0.642	Outer Lanes Freeway Speed (S _O), mi/h	81.3
Flow in Lanes 1 and 2 (v ₁₂), pc/h	2765	Ramp Junction Speed (S), mi/h	65.7
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	-	Average Density (D), pc/mi/ln	20.9
Level of Service (LOS)	B		

HCS7 Freeway Diverge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 SB @ Ethanac Rd	Analysis Year	Existing (2021)
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (L _D), ft	3460	1030
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	3833	419
Peak Hour Factor (PHF)	0.98	0.96
Total Trucks, %	4.08	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.961	1.000
Flow Rate (v _i), pc/h	4070	436
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.57	0.22

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	3067.0	Density in Ramp Influence Area (D _R), pc/mi/ln	18.7
Distance to Upstream Ramp (L _{UP}), ft	3460	Speed Index (D _S)	0.467
Downstream Equilibrium Distance (L _{EQ}), ft	-	Flow Outer Lanes (v _{OA}), pc/h/ln	1316
Distance to Downstream Ramp (L _{DOWN}), ft	2820	Off-Ramp Influence Area Speed (S _R), mi/h	59.8
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FD})	0.638	Outer Lanes Freeway Speed (S _O), mi/h	81.5
Flow in Lanes 1 and 2 (v ₁₂), pc/h	2754	Ramp Junction Speed (S), mi/h	65.4
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	-	Average Density (D), pc/mi/ln	20.7
Level of Service (LOS)	B		

HCS7 Freeway Merge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 SB @ Ethanac	Analysis Year	Existing (2021)
Jurisdiction	Caltrans District 8	Time Period Analyzed	AM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (L _A), ft	2820	860
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	3488	546
Peak Hour Factor (PHF)	0.96	0.96
Total Trucks, %	4.15	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.960	1.000
Flow Rate (v _i), pc/h	3785	569
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.60	0.28

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	741.8	Density in Ramp Influence Area (D _R), pc/mi/ln	22.1
Distance to Upstream Ramp (L _{UP}), ft	2820	Speed Index (M _s)	0.328
Downstream Equilibrium Distance (L _{EQ}), ft	0.0	Flow Outer Lanes (v _{OA}), pc/h/ln	1506
Distance to Downstream Ramp (L _{DOWN}), ft	7300	On-Ramp Influence Area Speed (S _R), mi/h	64.4
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FM})	0.602	Outer Lanes Freeway Speed (S _O), mi/h	71.8
Flow in Lanes 1 and 2 (v ₁₂), pc/h	2279	Ramp Junction Speed (S), mi/h	66.8
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	2848	Average Density (D), pc/mi/ln	21.7
Level of Service (LOS)	C		

HCS7 Freeway Merge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 SB @ Ethanac	Analysis Year	Existing (2021)
Jurisdiction	Caltrans District 8	Time Period Analyzed	PM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (L _A), ft	2820	860
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	3430	514
Peak Hour Factor (PHF)	0.98	0.94
Total Trucks, %	4.08	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.961	1.000
Flow Rate (v _i), pc/h	3642	547
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.58	0.27

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	706.5	Density in Ramp Influence Area (D _R), pc/mi/ln	21.3
Distance to Upstream Ramp (L _{UP}), ft	2820	Speed Index (M _s)	0.321
Downstream Equilibrium Distance (L _{EQ}), ft	0.0	Flow Outer Lanes (v _{OA}), pc/h/ln	1450
Distance to Downstream Ramp (L _{DOWN}), ft	7300	On-Ramp Influence Area Speed (S _R), mi/h	64.7
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FM})	0.602	Outer Lanes Freeway Speed (S _O), mi/h	72.0
Flow in Lanes 1 and 2 (v ₁₂), pc/h	2192	Ramp Junction Speed (S), mi/h	67.1
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	2739	Average Density (D), pc/mi/ln	20.8
Level of Service (LOS)	C		

Appendix F-2

Opening Day Conditions (2024)

HCS7 Freeway Diverge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 NB @ Ethanac Rd	Analysis Year	Opening Day (2024)
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (L _D), ft	7300	920
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	4474	699
Peak Hour Factor (PHF)	0.95	0.98
Total Trucks, %	1.83	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.982	1.000
Flow Rate (v _i), pc/h	4811	713
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.67	0.36

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	0.0	Density in Ramp Influence Area (D _R), pc/mi/ln	23.5
Distance to Upstream Ramp (L _{UP}), ft	7300	Speed Index (D _S)	0.492
Downstream Equilibrium Distance (L _{EQ}), ft	-	Flow Outer Lanes (v _{OA}), pc/h/ln	1611
Distance to Downstream Ramp (L _{DOWN}), ft	2670	Off-Ramp Influence Area Speed (S _R), mi/h	59.0
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FD})	0.607	Outer Lanes Freeway Speed (S _O), mi/h	80.3
Flow in Lanes 1 and 2 (v ₁₂), pc/h	3200	Ramp Junction Speed (S), mi/h	64.8
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	-	Average Density (D), pc/mi/ln	24.7
Level of Service (LOS)	C		

HCS7 Freeway Diverge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 NB @ Ethanac Rd	Analysis Year	Opening Day (2024)
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (L _D), ft	7300	920
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	5662	814
Peak Hour Factor (PHF)	0.89	0.94
Total Trucks, %	1.51	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.985	1.000
Flow Rate (v _i), pc/h	6459	866
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.90	0.43

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	0.0	Density in Ramp Influence Area (D _R), pc/mi/ln	30.3
Distance to Upstream Ramp (L _{UP}), ft	7300	Speed Index (D _S)	0.506
Downstream Equilibrium Distance (L _{EQ}), ft	-	Flow Outer Lanes (v _{OA}), pc/h/ln	2467
Distance to Downstream Ramp (L _{DOWN}), ft	2670	Off-Ramp Influence Area Speed (S _R), mi/h	58.5
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FD})	0.559	Outer Lanes Freeway Speed (S _O), mi/h	77.0
Flow in Lanes 1 and 2 (v ₁₂), pc/h	3992	Ramp Junction Speed (S), mi/h	64.4
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	-	Average Density (D), pc/mi/ln	33.4
Level of Service (LOS)	D		

HCS7 Freeway Merge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 NB @ Ethanac	Analysis Year	Opening Day (2024)
Jurisdiction	Caltrans District 8	Time Period Analyzed	AM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (L _A), ft	2670	920
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	3792	396
Peak Hour Factor (PHF)	0.95	0.98
Total Trucks, %	1.83	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.982	1.000
Flow Rate (v _i), pc/h	4065	404
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.62	0.20

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	793.1	Density in Ramp Influence Area (D _R), pc/mi/ln	22.3
Distance to Upstream Ramp (L _{UP}), ft	2670	Speed Index (M _s)	0.328
Downstream Equilibrium Distance (L _{EQ}), ft	3155.1	Flow Outer Lanes (v _{OA}), pc/h/ln	1561
Distance to Downstream Ramp (L _{DOWN}), ft	2550	On-Ramp Influence Area Speed (S _R), mi/h	64.4
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FM})	0.616	Outer Lanes Freeway Speed (S _O), mi/h	71.6
Flow in Lanes 1 and 2 (v ₁₂), pc/h	2504	Ramp Junction Speed (S), mi/h	66.7
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	2908	Average Density (D), pc/mi/ln	22.3
Level of Service (LOS)	C		

HCS7 Freeway Merge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 NB @ Ethanac	Analysis Year	Opening Day (2024)
Jurisdiction	Caltrans District 8	Time Period Analyzed	PM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (L _A), ft	2670	920
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	4873	787
Peak Hour Factor (PHF)	0.89	0.94
Total Trucks, %	1.51	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.985	1.000
Flow Rate (v _i), pc/h	5559	837
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.89	0.42

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	1205.4	Density in Ramp Influence Area (D _R), pc/mi/ln	32.1
Distance to Upstream Ramp (L _{UP}), ft	2670	Speed Index (M _s)	0.514
Downstream Equilibrium Distance (L _{EQ}), ft	1713.1	Flow Outer Lanes (v _{OA}), pc/h/ln	2207
Distance to Downstream Ramp (L _{DOWN}), ft	2550	On-Ramp Influence Area Speed (S _R), mi/h	58.2
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FM})	0.603	Outer Lanes Freeway Speed (S _O), mi/h	69.3
Flow in Lanes 1 and 2 (v ₁₂), pc/h	3352	Ramp Junction Speed (S), mi/h	61.6
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	4189	Average Density (D), pc/mi/ln	34.6
Level of Service (LOS)	D		

HCS7 Freeway Diverge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 NB @ SR-74	Analysis Year	Opening Day (2024)
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (L _D), ft	2550	430
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	4177	617
Peak Hour Factor (PHF)	0.95	0.94
Total Trucks, %	1.83	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.982	1.000
Flow Rate (v _i), pc/h	4477	656
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.62	0.33

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	3280.4	Density in Ramp Influence Area (D _R), pc/mi/ln	26.3
Distance to Upstream Ramp (L _{UP}), ft	2550	Speed Index (D _S)	0.487
Downstream Equilibrium Distance (L _{EQ}), ft	-	Flow Outer Lanes (v _{OA}), pc/h/ln	1460
Distance to Downstream Ramp (L _{DOWN}), ft	1570	Off-Ramp Influence Area Speed (S _R), mi/h	59.1
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FD})	0.618	Outer Lanes Freeway Speed (S _O), mi/h	80.9
Flow in Lanes 1 and 2 (v ₁₂), pc/h	3017	Ramp Junction Speed (S), mi/h	64.8
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	-	Average Density (D), pc/mi/ln	23.0
Level of Service (LOS)	C		

HCS7 Freeway Diverge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 NB @ SR-74	Analysis Year	Opening Day (2024)
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (L _D), ft	2550	430
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	5644	335
Peak Hour Factor (PHF)	0.89	0.94
Total Trucks, %	1.51	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.985	1.000
Flow Rate (v _i), pc/h	6438	356
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.89	0.18

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	4360.2	Density in Ramp Influence Area (D _R), pc/mi/ln	33.9
Distance to Upstream Ramp (L _{UP}), ft	2550	Speed Index (D _S)	0.460
Downstream Equilibrium Distance (L _{EQ}), ft	-	Flow Outer Lanes (v _{OA}), pc/h/ln	2536
Distance to Downstream Ramp (L _{DOWN}), ft	1570	Off-Ramp Influence Area Speed (S _R), mi/h	60.0
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FD})	0.583	Outer Lanes Freeway Speed (S _O), mi/h	76.7
Flow in Lanes 1 and 2 (v ₁₂), pc/h	3902	Ramp Junction Speed (S), mi/h	65.6
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	-	Average Density (D), pc/mi/ln	32.7
Level of Service (LOS)	D		

HCS7 Freeway Merge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 NB @ SR-74	Analysis Year	Opening Day (2024)
Jurisdiction	Caltrans District 8	Time Period Analyzed	AM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (L _A), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	3572	565
Peak Hour Factor (PHF)	0.95	0.94
Total Trucks, %	1.83	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.982	1.000
Flow Rate (v _i), pc/h	3829	601
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.62	0.30

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	1042.2	Density in Ramp Influence Area (D _R), pc/mi/ln	19.1
Distance to Upstream Ramp (L _{UP}), ft	1570	Speed Index (M _s)	0.292
Downstream Equilibrium Distance (L _{EQ}), ft	-	Flow Outer Lanes (v _{OA}), pc/h/ln	1455
Distance to Downstream Ramp (L _{DOWN}), ft	-	On-Ramp Influence Area Speed (S _R), mi/h	65.6
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FM})	0.620	Outer Lanes Freeway Speed (S _O), mi/h	72.0
Flow in Lanes 1 and 2 (v ₁₂), pc/h	2374	Ramp Junction Speed (S), mi/h	67.6
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	2975	Average Density (D), pc/mi/ln	21.8
Level of Service (LOS)	B		

HCS7 Freeway Merge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 NB @ SR-74	Analysis Year	Opening Day (2024)
Jurisdiction	Caltrans District 8	Time Period Analyzed	PM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (L _A), ft	1570	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	5315	881
Peak Hour Factor (PHF)	0.89	0.94
Total Trucks, %	1.51	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.985	1.000
Flow Rate (v _i), pc/h	6063	937
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.97	0.47

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	1592.2	Density in Ramp Influence Area (D _R), pc/mi/ln	32.2
Distance to Upstream Ramp (L _{UP}), ft	1570	Speed Index (M _s)	0.638
Downstream Equilibrium Distance (L _{EQ}), ft	-	Flow Outer Lanes (v _{OA}), pc/h/ln	2316
Distance to Downstream Ramp (L _{DOWN}), ft	-	On-Ramp Influence Area Speed (S _R), mi/h	54.1
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FM})	0.618	Outer Lanes Freeway Speed (S _O), mi/h	68.8
Flow in Lanes 1 and 2 (v ₁₂), pc/h	3747	Ramp Junction Speed (S), mi/h	58.2
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	4684	Average Density (D), pc/mi/ln	40.1
Level of Service (LOS)	D		

HCS7 Freeway Diverge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 SB @ SR-74	Analysis Year	Opening Day (20243)
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (L _D), ft	10000	1270
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	4620	745
Peak Hour Factor (PHF)	0.96	0.97
Total Trucks, %	4.15	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.960	1.000
Flow Rate (v _i), pc/h	5013	768
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.70	0.38

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	-	Density in Ramp Influence Area (D _R), pc/mi/ln	21.3
Distance to Upstream Ramp (L _{UP}), ft	-	Speed Index (D _S)	0.497
Downstream Equilibrium Distance (L _{EQ}), ft	-	Flow Outer Lanes (v _{OA}), pc/h/ln	1702
Distance to Downstream Ramp (L _{DOWN}), ft	1360	Off-Ramp Influence Area Speed (S _R), mi/h	58.8
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FD})	0.599	Outer Lanes Freeway Speed (S _O), mi/h	80.0
Flow in Lanes 1 and 2 (v ₁₂), pc/h	3311	Ramp Junction Speed (S), mi/h	64.6
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	-	Average Density (D), pc/mi/ln	25.9
Level of Service (LOS)	C		

HCS7 Freeway Diverge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 SB @ SR-74	Analysis Year	Opening Day (2024)
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (L _D), ft	10000	1270
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	4906	1020
Peak Hour Factor (PHF)	0.98	0.93
Total Trucks, %	4.08	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.961	1.000
Flow Rate (v _i), pc/h	5209	1097
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.72	0.55

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	-	Density in Ramp Influence Area (D _R), pc/mi/ln	22.7
Distance to Upstream Ramp (L _{UP}), ft	-	Speed Index (D _S)	0.527
Downstream Equilibrium Distance (L _{EQ}), ft	-	Flow Outer Lanes (v _{OA}), pc/h/ln	1731
Distance to Downstream Ramp (L _{DOWN}), ft	1360	Off-Ramp Influence Area Speed (S _R), mi/h	57.8
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FD})	0.579	Outer Lanes Freeway Speed (S _O), mi/h	79.9
Flow in Lanes 1 and 2 (v ₁₂), pc/h	3478	Ramp Junction Speed (S), mi/h	63.7
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	-	Average Density (D), pc/mi/ln	27.3
Level of Service (LOS)	C		

HCS7 Freeway Merge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 SB @ SR-74	Analysis Year	Opening Day (2024)
Jurisdiction	Caltrans District 8	Time Period Analyzed	AM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (L _A), ft	1360	350
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	3888	498
Peak Hour Factor (PHF)	0.96	0.97
Total Trucks, %	4.15	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.960	1.000
Flow Rate (v _i), pc/h	4219	513
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.66	0.26

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	596.3	Density in Ramp Influence Area (D _R), pc/mi/ln	27.0
Distance to Upstream Ramp (L _{UP}), ft	1360	Speed Index (M _s)	0.380
Downstream Equilibrium Distance (L _{EQ}), ft	4909.0	Flow Outer Lanes (v _{OA}), pc/h/ln	1671
Distance to Downstream Ramp (L _{DOWN}), ft	3460	On-Ramp Influence Area Speed (S _R), mi/h	62.7
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FM})	0.604	Outer Lanes Freeway Speed (S _O), mi/h	71.2
Flow in Lanes 1 and 2 (v ₁₂), pc/h	2548	Ramp Junction Speed (S), mi/h	65.5
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	3061	Average Density (D), pc/mi/ln	24.1
Level of Service (LOS)	C		

HCS7 Freeway Merge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 SB @ SR-74	Analysis Year	Opening Day (2024)
Jurisdiction	Caltrans District 8	Time Period Analyzed	PM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (L _A), ft	1360	350
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	3907	398
Peak Hour Factor (PHF)	0.98	0.93
Total Trucks, %	4.08	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.961	1.000
Flow Rate (v _i), pc/h	4149	428
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.64	0.21

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	563.1	Density in Ramp Influence Area (D _R), pc/mi/ln	26.0
Distance to Upstream Ramp (L _{UP}), ft	1360	Speed Index (M _s)	0.369
Downstream Equilibrium Distance (L _{EQ}), ft	4802.8	Flow Outer Lanes (v _{OA}), pc/h/ln	1651
Distance to Downstream Ramp (L _{DOWN}), ft	3460	On-Ramp Influence Area Speed (S _R), mi/h	63.1
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FM})	0.602	Outer Lanes Freeway Speed (S _O), mi/h	71.3
Flow in Lanes 1 and 2 (v ₁₂), pc/h	2498	Ramp Junction Speed (S), mi/h	65.8
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	2926	Average Density (D), pc/mi/ln	23.2
Level of Service (LOS)	C		

HCS7 Freeway Diverge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 SB @ Ethanac Rd	Analysis Year	Opening Day (2024)
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (L _D), ft	3460	1030
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	4377	693
Peak Hour Factor (PHF)	0.96	0.96
Total Trucks, %	4.15	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.960	1.000
Flow Rate (v _i), pc/h	4749	722
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.66	0.36

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	4095.6	Density in Ramp Influence Area (D _R), pc/mi/ln	22.2
Distance to Upstream Ramp (L _{UP}), ft	3460	Speed Index (D _S)	0.493
Downstream Equilibrium Distance (L _{EQ}), ft	-	Flow Outer Lanes (v _{OA}), pc/h/ln	1579
Distance to Downstream Ramp (L _{DOWN}), ft	2820	Off-Ramp Influence Area Speed (S _R), mi/h	58.9
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FD})	0.608	Outer Lanes Freeway Speed (S _O), mi/h	80.5
Flow in Lanes 1 and 2 (v ₁₂), pc/h	3170	Ramp Junction Speed (S), mi/h	64.7
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	-	Average Density (D), pc/mi/ln	24.5
Level of Service (LOS)	C		

HCS7 Freeway Diverge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 SB @ Ethanac Rd	Analysis Year	Opening Day (2024)
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (L _D), ft	3460	1030
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	4297	678
Peak Hour Factor (PHF)	0.98	0.96
Total Trucks, %	4.08	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.961	1.000
Flow Rate (v _i), pc/h	4563	706
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.63	0.35

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	3499.4	Density in Ramp Influence Area (D _R), pc/mi/ln	21.4
Distance to Upstream Ramp (L _{UP}), ft	3460	Speed Index (D _S)	0.492
Downstream Equilibrium Distance (L _{EQ}), ft	-	Flow Outer Lanes (v _{OA}), pc/h/ln	1493
Distance to Downstream Ramp (L _{DOWN}), ft	2820	Off-Ramp Influence Area Speed (S _R), mi/h	59.0
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FD})	0.613	Outer Lanes Freeway Speed (S _O), mi/h	80.8
Flow in Lanes 1 and 2 (v ₁₂), pc/h	3070	Ramp Junction Speed (S), mi/h	64.7
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	-	Average Density (D), pc/mi/ln	23.5
Level of Service (LOS)	C		

HCS7 Freeway Merge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 SB @ Ethanac	Analysis Year	Opening Day (2024)
Jurisdiction	Caltrans District 8	Time Period Analyzed	AM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (L _A), ft	2820	860
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	3697	648
Peak Hour Factor (PHF)	0.96	0.96
Total Trucks, %	4.15	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.960	1.000
Flow Rate (v _i), pc/h	4012	675
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.65	0.34

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	813.1	Density in Ramp Influence Area (D _R), pc/mi/ln	23.9
Distance to Upstream Ramp (L _{UP}), ft	2820	Speed Index (M _s)	0.347
Downstream Equilibrium Distance (L _{EQ}), ft	0.0	Flow Outer Lanes (v _{OA}), pc/h/ln	1597
Distance to Downstream Ramp (L _{DOWN}), ft	7300	On-Ramp Influence Area Speed (S _R), mi/h	63.8
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FM})	0.602	Outer Lanes Freeway Speed (S _O), mi/h	71.5
Flow in Lanes 1 and 2 (v ₁₂), pc/h	2415	Ramp Junction Speed (S), mi/h	66.2
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	3090	Average Density (D), pc/mi/ln	23.6
Level of Service (LOS)	C		

HCS7 Freeway Merge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 SB @ Ethanac	Analysis Year	Opening Day (2024)
Jurisdiction	Caltrans District 8	Time Period Analyzed	PM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (L _A), ft	2820	860
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	3636	803
Peak Hour Factor (PHF)	0.98	0.94
Total Trucks, %	4.08	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.961	1.000
Flow Rate (v _i), pc/h	3861	854
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.65	0.43

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	819.1	Density in Ramp Influence Area (D _R), pc/mi/ln	24.6
Distance to Upstream Ramp (L _{UP}), ft	2820	Speed Index (M _s)	0.354
Downstream Equilibrium Distance (L _{EQ}), ft	0.0	Flow Outer Lanes (v _{OA}), pc/h/ln	1537
Distance to Downstream Ramp (L _{DOWN}), ft	7300	On-Ramp Influence Area Speed (S _R), mi/h	63.6
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FM})	0.602	Outer Lanes Freeway Speed (S _O), mi/h	71.7
Flow in Lanes 1 and 2 (v ₁₂), pc/h	2324	Ramp Junction Speed (S), mi/h	66.0
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	3178	Average Density (D), pc/mi/ln	23.8
Level of Service (LOS)	C		

Appendix F-3

Opening Day with Cumulative Projects

HCS7 Freeway Diverge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 NB @ Ethanac Rd	Analysis Year	Opening Day w CP (2024)
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (L _D), ft	7300	920
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	4601	812
Peak Hour Factor (PHF)	0.95	0.98
Total Trucks, %	1.83	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.982	1.000
Flow Rate (v _i), pc/h	4948	829
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.69	0.41

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	0.0	Density in Ramp Influence Area (D _R), pc/mi/ln	24.3
Distance to Upstream Ramp (L _{UP}), ft	7300	Speed Index (D _S)	0.503
Downstream Equilibrium Distance (L _{EQ}), ft	-	Flow Outer Lanes (v _{OA}), pc/h/ln	1656
Distance to Downstream Ramp (L _{DOWN}), ft	2670	Off-Ramp Influence Area Speed (S _R), mi/h	58.6
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FD})	0.598	Outer Lanes Freeway Speed (S _O), mi/h	80.2
Flow in Lanes 1 and 2 (v ₁₂), pc/h	3292	Ramp Junction Speed (S), mi/h	64.4
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	-	Average Density (D), pc/mi/ln	25.6
Level of Service (LOS)	C		

HCS7 Freeway Diverge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 NB @ Ethanac Rd	Analysis Year	Opening Day w CP (2024)
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (L _D), ft	7300	920
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	5864	989
Peak Hour Factor (PHF)	0.89	0.94
Total Trucks, %	1.51	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.985	1.000
Flow Rate (v _i), pc/h	6689	1052
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.93	0.53

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	0.0	Density in Ramp Influence Area (D _R), pc/mi/ln	31.4
Distance to Upstream Ramp (L _{UP}), ft	7300	Speed Index (D _S)	0.523
Downstream Equilibrium Distance (L _{EQ}), ft	-	Flow Outer Lanes (v _{OA}), pc/h/ln	2570
Distance to Downstream Ramp (L _{DOWN}), ft	2670	Off-Ramp Influence Area Speed (S _R), mi/h	57.9
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FD})	0.544	Outer Lanes Freeway Speed (S _O), mi/h	76.6
Flow in Lanes 1 and 2 (v ₁₂), pc/h	4119	Ramp Junction Speed (S), mi/h	63.9
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	-	Average Density (D), pc/mi/ln	34.9
Level of Service (LOS)	D		

HCS7 Freeway Merge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 NB @ Ethanac	Analysis Year	Opening Day w CP (2024)
Jurisdiction	Caltrans District 8	Time Period Analyzed	AM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (L _A), ft	2670	920
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	3806	520
Peak Hour Factor (PHF)	0.95	0.98
Total Trucks, %	1.83	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.982	1.000
Flow Rate (v _i), pc/h	4080	531
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.64	0.27

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	823.4	Density in Ramp Influence Area (D _R), pc/mi/ln	23.3
Distance to Upstream Ramp (L _{UP}), ft	2670	Speed Index (M _s)	0.339
Downstream Equilibrium Distance (L _{EQ}), ft	3226.7	Flow Outer Lanes (v _{OA}), pc/h/ln	1559
Distance to Downstream Ramp (L _{DOWN}), ft	2550	On-Ramp Influence Area Speed (S _R), mi/h	64.1
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FM})	0.618	Outer Lanes Freeway Speed (S _O), mi/h	71.6
Flow in Lanes 1 and 2 (v ₁₂), pc/h	2521	Ramp Junction Speed (S), mi/h	66.5
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	3052	Average Density (D), pc/mi/ln	23.1
Level of Service (LOS)	C		

HCS7 Freeway Merge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 NB @ Ethanac	Analysis Year	Opening Day w CP (2024)
Jurisdiction	Caltrans District 8	Time Period Analyzed	PM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (L _A), ft	2670	920
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	4900	964
Peak Hour Factor (PHF)	0.89	0.94
Total Trucks, %	1.51	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.985	1.000
Flow Rate (v _i), pc/h	5589	1026
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.92	0.51

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	1252.3	Density in Ramp Influence Area (D _R), pc/mi/ln	33.6
Distance to Upstream Ramp (L _{UP}), ft	2670	Speed Index (M _s)	0.573
Downstream Equilibrium Distance (L _{EQ}), ft	1851.1	Flow Outer Lanes (v _{OA}), pc/h/ln	2219
Distance to Downstream Ramp (L _{DOWN}), ft	2550	On-Ramp Influence Area Speed (S _R), mi/h	56.3
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FM})	0.603	Outer Lanes Freeway Speed (S _O), mi/h	69.2
Flow in Lanes 1 and 2 (v ₁₂), pc/h	3370	Ramp Junction Speed (S), mi/h	60.1
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	4396	Average Density (D), pc/mi/ln	36.7
Level of Service (LOS)	D		

HCS7 Freeway Diverge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 NB @ SR-74	Analysis Year	Opening Day w CP (2024)
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (L _D), ft	2550	430
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	4301	631
Peak Hour Factor (PHF)	0.95	0.94
Total Trucks, %	1.83	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.982	1.000
Flow Rate (v _i), pc/h	4610	671
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.64	0.34

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	4210.1	Density in Ramp Influence Area (D _R), pc/mi/ln	27.0
Distance to Upstream Ramp (L _{UP}), ft	2550	Speed Index (D _S)	0.488
Downstream Equilibrium Distance (L _{EQ}), ft	-	Flow Outer Lanes (v _{OA}), pc/h/ln	1520
Distance to Downstream Ramp (L _{DOWN}), ft	1570	Off-Ramp Influence Area Speed (S _R), mi/h	59.1
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FD})	0.614	Outer Lanes Freeway Speed (S _O), mi/h	80.7
Flow in Lanes 1 and 2 (v ₁₂), pc/h	3090	Ramp Junction Speed (S), mi/h	64.8
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	-	Average Density (D), pc/mi/ln	23.7
Level of Service (LOS)	C		

HCS7 Freeway Diverge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 NB @ SR-74	Analysis Year	Opening Day w CP (2024)
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (L _D), ft	2550	430
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	5821	362
Peak Hour Factor (PHF)	0.89	0.94
Total Trucks, %	1.51	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.985	1.000
Flow Rate (v _i), pc/h	6640	385
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.92	0.19

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	5273.7	Density in Ramp Influence Area (D _R), pc/mi/ln	34.7
Distance to Upstream Ramp (L _{UP}), ft	2550	Speed Index (D _S)	0.463
Downstream Equilibrium Distance (L _{EQ}), ft	-	Flow Outer Lanes (v _{OA}), pc/h/ln	2652
Distance to Downstream Ramp (L _{DOWN}), ft	1570	Off-Ramp Influence Area Speed (S _R), mi/h	59.9
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FD})	0.576	Outer Lanes Freeway Speed (S _O), mi/h	76.3
Flow in Lanes 1 and 2 (v ₁₂), pc/h	3988	Ramp Junction Speed (S), mi/h	65.5
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	-	Average Density (D), pc/mi/ln	33.8
Level of Service (LOS)	D		

HCS7 Freeway Merge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 NB @ SR-74	Analysis Year	Opening Day w CP (2024)
Jurisdiction	Caltrans District 8	Time Period Analyzed	AM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (L _A), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	3696	578
Peak Hour Factor (PHF)	0.95	0.94
Total Trucks, %	1.83	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.982	1.000
Flow Rate (v _i), pc/h	3962	615
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.64	0.31

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	1073.7	Density in Ramp Influence Area (D _R), pc/mi/ln	19.8
Distance to Upstream Ramp (L _{UP}), ft	1570	Speed Index (M _s)	0.300
Downstream Equilibrium Distance (L _{EQ}), ft	-	Flow Outer Lanes (v _{OA}), pc/h/ln	1506
Distance to Downstream Ramp (L _{DOWN}), ft	-	On-Ramp Influence Area Speed (S _R), mi/h	65.4
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FM})	0.620	Outer Lanes Freeway Speed (S _O), mi/h	71.8
Flow in Lanes 1 and 2 (v ₁₂), pc/h	2456	Ramp Junction Speed (S), mi/h	67.4
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	3071	Average Density (D), pc/mi/ln	22.6
Level of Service (LOS)	B		

HCS7 Freeway Merge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 NB @ SR-74	Analysis Year	Opening Day w CP (2024)
Jurisdiction	Caltrans District 8	Time Period Analyzed	PM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (L _A), ft	1570	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	5492	895
Peak Hour Factor (PHF)	0.89	0.94
Total Trucks, %	1.51	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.985	1.000
Flow Rate (v _i), pc/h	6265	952
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	1.00	0.48

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	1638.6	Density in Ramp Influence Area (D _R), pc/mi/ln	33.2
Distance to Upstream Ramp (L _{UP}), ft	1570	Speed Index (M _s)	0.692
Downstream Equilibrium Distance (L _{EQ}), ft	-	Flow Outer Lanes (v _{OA}), pc/h/ln	2412
Distance to Downstream Ramp (L _{DOWN}), ft	-	On-Ramp Influence Area Speed (S _R), mi/h	52.3
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FM})	0.615	Outer Lanes Freeway Speed (S _O), mi/h	68.2
Flow in Lanes 1 and 2 (v ₁₂), pc/h	3853	Ramp Junction Speed (S), mi/h	56.7
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	4805	Average Density (D), pc/mi/ln	42.4
Level of Service (LOS)	D		

HCS7 Freeway Diverge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 SB @ SR-74	Analysis Year	Opening Day (2023)
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (L _D), ft	10000	1270
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	4724	756
Peak Hour Factor (PHF)	0.96	0.97
Total Trucks, %	4.15	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.960	1.000
Flow Rate (v _i), pc/h	5126	779
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.71	0.39

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	-	Density in Ramp Influence Area (D _R), pc/mi/ln	21.8
Distance to Upstream Ramp (L _{UP}), ft	-	Speed Index (D _S)	0.498
Downstream Equilibrium Distance (L _{EQ}), ft	-	Flow Outer Lanes (v _{OA}), pc/h/ln	1756
Distance to Downstream Ramp (L _{DOWN}), ft	1360	Off-Ramp Influence Area Speed (S _R), mi/h	58.8
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FD})	0.596	Outer Lanes Freeway Speed (S _O), mi/h	79.8
Flow in Lanes 1 and 2 (v ₁₂), pc/h	3370	Ramp Junction Speed (S), mi/h	64.6
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	-	Average Density (D), pc/mi/ln	26.4
Level of Service (LOS)	C		

HCS7 Freeway Diverge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 SB @ SR-74	Analysis Year	Opening Day w CP (2024)
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (L _D), ft	10000	1270
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	5084	1035
Peak Hour Factor (PHF)	0.98	0.93
Total Trucks, %	4.08	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.961	1.000
Flow Rate (v _i), pc/h	5398	1113
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.75	0.56

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	-	Density in Ramp Influence Area (D _R), pc/mi/ln	23.5
Distance to Upstream Ramp (L _{UP}), ft	-	Speed Index (D _S)	0.528
Downstream Equilibrium Distance (L _{EQ}), ft	-	Flow Outer Lanes (v _{OA}), pc/h/ln	1825
Distance to Downstream Ramp (L _{DOWN}), ft	1360	Off-Ramp Influence Area Speed (S _R), mi/h	57.8
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FD})	0.574	Outer Lanes Freeway Speed (S _O), mi/h	79.5
Flow in Lanes 1 and 2 (v ₁₂), pc/h	3573	Ramp Junction Speed (S), mi/h	63.7
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	-	Average Density (D), pc/mi/ln	28.2
Level of Service (LOS)	C		

HCS7 Freeway Merge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 SB @ SR-74	Analysis Year	Opening Day w CP (2024)
Jurisdiction	Caltrans District 8	Time Period Analyzed	AM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (L _A), ft	1360	350
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	3981	521
Peak Hour Factor (PHF)	0.96	0.97
Total Trucks, %	4.15	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.960	1.000
Flow Rate (v _i), pc/h	4320	537
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.67	0.27

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	623.0	Density in Ramp Influence Area (D _R), pc/mi/ln	27.9
Distance to Upstream Ramp (L _{UP}), ft	1360	Speed Index (M _s)	0.391
Downstream Equilibrium Distance (L _{EQ}), ft	5730.8	Flow Outer Lanes (v _{OA}), pc/h/ln	1672
Distance to Downstream Ramp (L _{DOWN}), ft	3460	On-Ramp Influence Area Speed (S _R), mi/h	62.3
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FM})	0.613	Outer Lanes Freeway Speed (S _O), mi/h	71.2
Flow in Lanes 1 and 2 (v ₁₂), pc/h	2648	Ramp Junction Speed (S), mi/h	65.1
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	3185	Average Density (D), pc/mi/ln	24.9
Level of Service (LOS)	C		

HCS7 Freeway Merge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 SB @ SR-74	Analysis Year	Opening Day w CP (2024)
Jurisdiction	Caltrans District 8	Time Period Analyzed	PM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (L _A), ft	1360	350
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	4070	419
Peak Hour Factor (PHF)	0.98	0.93
Total Trucks, %	4.08	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.961	1.000
Flow Rate (v _i), pc/h	4322	451
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.66	0.23

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	605.0	Density in Ramp Influence Area (D _R), pc/mi/ln	27.5
Distance to Upstream Ramp (L _{UP}), ft	1360	Speed Index (M _s)	0.385
Downstream Equilibrium Distance (L _{EQ}), ft	6106.2	Flow Outer Lanes (v _{OA}), pc/h/ln	1655
Distance to Downstream Ramp (L _{DOWN}), ft	3460	On-Ramp Influence Area Speed (S _R), mi/h	62.5
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FM})	0.617	Outer Lanes Freeway Speed (S _O), mi/h	71.2
Flow in Lanes 1 and 2 (v ₁₂), pc/h	2667	Ramp Junction Speed (S), mi/h	65.3
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	3118	Average Density (D), pc/mi/ln	24.4
Level of Service (LOS)	C		

HCS7 Freeway Diverge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 SB @ Ethanac Rd	Analysis Year	Opening Day w CP (2024)
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (L _D), ft	3460	1030
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	4516	809
Peak Hour Factor (PHF)	0.96	0.96
Total Trucks, %	4.15	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.960	1.000
Flow Rate (v _i), pc/h	4900	843
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.68	0.42

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	4489.7	Density in Ramp Influence Area (D _R), pc/mi/ln	23.1
Distance to Upstream Ramp (L _{UP}), ft	3460	Speed Index (D _S)	0.504
Downstream Equilibrium Distance (L _{EQ}), ft	-	Flow Outer Lanes (v _{OA}), pc/h/ln	1627
Distance to Downstream Ramp (L _{DOWN}), ft	2820	Off-Ramp Influence Area Speed (S _R), mi/h	58.6
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FD})	0.599	Outer Lanes Freeway Speed (S _O), mi/h	80.3
Flow in Lanes 1 and 2 (v ₁₂), pc/h	3273	Ramp Junction Speed (S), mi/h	64.4
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	-	Average Density (D), pc/mi/ln	25.4
Level of Service (LOS)	C		

HCS7 Freeway Diverge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 SB @ Ethanac Rd	Analysis Year	Opening Day w CP (2024)
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (L _D), ft	3460	1030
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	4502	862
Peak Hour Factor (PHF)	0.98	0.96
Total Trucks, %	4.08	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.961	1.000
Flow Rate (v _i), pc/h	4780	898
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.66	0.45

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	3998.0	Density in Ramp Influence Area (D _R), pc/mi/ln	22.7
Distance to Upstream Ramp (L _{UP}), ft	3460	Speed Index (D _S)	0.509
Downstream Equilibrium Distance (L _{EQ}), ft	-	Flow Outer Lanes (v _{OA}), pc/h/ln	1557
Distance to Downstream Ramp (L _{DOWN}), ft	2820	Off-Ramp Influence Area Speed (S _R), mi/h	58.4
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FD})	0.599	Outer Lanes Freeway Speed (S _O), mi/h	80.5
Flow in Lanes 1 and 2 (v ₁₂), pc/h	3223	Ramp Junction Speed (S), mi/h	64.1
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	-	Average Density (D), pc/mi/ln	24.9
Level of Service (LOS)	C		

HCS7 Freeway Merge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 SB @ Ethanac	Analysis Year	Opening Day w CP (2024)
Jurisdiction	Caltrans District 8	Time Period Analyzed	AM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (L _A), ft	2820	860
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	3720	765
Peak Hour Factor (PHF)	0.96	0.96
Total Trucks, %	4.15	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.960	1.000
Flow Rate (v _i), pc/h	4036	797
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.67	0.40

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	844.3	Density in Ramp Influence Area (D _R), pc/mi/ln	25.0
Distance to Upstream Ramp (L _{UP}), ft	2820	Speed Index (M _s)	0.359
Downstream Equilibrium Distance (L _{EQ}), ft	0.0	Flow Outer Lanes (v _{OA}), pc/h/ln	1606
Distance to Downstream Ramp (L _{DOWN}), ft	7300	On-Ramp Influence Area Speed (S _R), mi/h	63.4
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FM})	0.602	Outer Lanes Freeway Speed (S _O), mi/h	71.4
Flow in Lanes 1 and 2 (v ₁₂), pc/h	2430	Ramp Junction Speed (S), mi/h	65.9
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	3227	Average Density (D), pc/mi/ln	24.4
Level of Service (LOS)	C		

HCS7 Freeway Merge Report

Project Information

Analyst	Albert A Webb Associates	Date	2021-06-10
Agency	I-215 SB @ Ethanac	Analysis Year	Opening Day w CP (2024)
Jurisdiction	Caltrans District 8	Time Period Analyzed	PM Peak Hour
Project Description	Menifee Commerce Center Warehouse Project		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (L _A), ft	2820	860
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Volume (V _i), veh/h	3657	975
Peak Hour Factor (PHF)	0.98	0.94
Total Trucks, %	4.08	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.961	1.000
Flow Rate (v _i), pc/h	3883	1037
Capacity (c), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.68	0.52

Speed and Density

Upstream Equilibrium Distance (L _{EQ}), ft	862.9	Density in Ramp Influence Area (D _R), pc/mi/ln	26.0
Distance to Upstream Ramp (L _{UP}), ft	2820	Speed Index (M _s)	0.375
Downstream Equilibrium Distance (L _{EQ}), ft	0.0	Flow Outer Lanes (v _{OA}), pc/h/ln	1545
Distance to Downstream Ramp (L _{DOWN}), ft	7300	On-Ramp Influence Area Speed (S _R), mi/h	62.9
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FM})	0.602	Outer Lanes Freeway Speed (S _O), mi/h	71.6
Flow in Lanes 1 and 2 (v ₁₂), pc/h	2338	Ramp Junction Speed (S), mi/h	65.4
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	3375	Average Density (D), pc/mi/ln	25.1
Level of Service (LOS)	C		

Appendix G

Traffic Signal Warrant Worksheets

Signal Warrants Report For Intersection 9: Ethanac Rd @ Encanto Dr

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	Yes
#2	Four Hour Vehicular Volume	Yes
#3	Peak Hour	Yes

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	E	W	S
1	593	636	178
2	569	611	171
3	557	598	167
4	474	509	142
5	451	483	135
6	403	432	121
7	374	401	112
8	356	382	107
9	285	305	85
10	267	286	80
11	267	286	80
12	255	273	77
13	231	248	69
14	213	229	64
15	213	229	64
16	208	223	62
17	119	127	36
18	65	70	20
19	59	64	18
20	24	25	7
21	18	19	5
22	18	19	5
23	12	13	4
24	12	13	4

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	3	1229	1	178	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	3	1180	1	171	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	3	1155	1	167	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	3	983	1	142	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5	3	934	1	135	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6	3	835	1	121	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
7	3	775	1	112	No	No	Yes	Yes	No	Yes	Yes	Yes	Yes	No
8	3	738	1	107	No	No	Yes	Yes	No	Yes	Yes	Yes	Yes	No
9	3	590	1	85	No	No	No	Yes	No	No	No	Yes	No	No
10	3	553	1	80	No	No	No	No	No	No	No	Yes	No	No
11	3	553	1	80	No	No	No	No	No	No	No	Yes	No	No
12	3	528	1	77	No	No	No	No	No	No	No	Yes	No	No
13	3	479	1	69	No	No	No	No	No	No	No	No	No	No
14	3	442	1	64	No	No	No	No	No	No	No	No	No	No
15	3	442	1	64	No	No	No	No	No	No	No	No	No	No
16	3	431	1	62	No	No	No	No	No	No	No	No	No	No
17	3	246	1	36	No	No	No	No	No	No	No	No	No	No
18	3	135	1	20	No	No	No	No	No	No	No	No	No	No
19	3	123	1	18	No	No	No	No	No	No	No	No	No	No
20	3	49	1	7	No	No	No	No	No	No	No	No	No	No
21	3	37	1	5	No	No	No	No	No	No	No	No	No	No
22	3	37	1	5	No	No	No	No	No	No	No	No	No	No
23	3	25	1	4	No	No	No	No	No	No	No	No	No	No
24	3	25	1	4	No	No	No	No	No	No	No	No	No	No
Hours Met					3	6	8	9	5	8	8	12	8	5

Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	63.7
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	3:09
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	178
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	1407
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 11: Ethanac Rd @ Sherman Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S, N
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	E	W	S	N
1	386	477	11	115
2	371	458	11	110
3	363	448	10	108
4	309	382	9	92
5	293	363	8	87
6	262	324	7	78
7	243	301	7	72
8	232	286	7	69
9	185	229	5	55
10	174	215	5	52
11	174	215	5	52
12	166	205	5	49
13	151	186	4	45
14	139	172	4	41
15	139	172	4	41
16	135	167	4	40
17	77	95	2	23
18	42	52	1	13
19	39	48	1	12
20	15	19	0	5
21	12	14	0	3
22	12	14	0	3
23	8	10	0	2
24	8	10	0	2

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	863	2	126	No	No	Yes	Yes	No	Yes	Yes	Yes	Yes	No
2	2	829	2	121	No	No	Yes	Yes	No	Yes	Yes	Yes	Yes	No
3	2	811	2	118	No	No	Yes	Yes	No	Yes	Yes	Yes	Yes	No
4	2	691	2	101	No	No	No	Yes	No	No	Yes	Yes	No	No
5	2	656	2	95	No	No	No	Yes	No	No	Yes	Yes	No	No
6	2	586	2	85	No	No	No	No	No	No	No	Yes	No	No
7	2	544	2	79	No	No	No	No	No	No	No	Yes	No	No
8	2	518	2	76	No	No	No	No	No	No	No	Yes	No	No
9	2	414	2	60	No	No	No	No	No	No	No	No	No	No
10	2	389	2	57	No	No	No	No	No	No	No	No	No	No
11	2	389	2	57	No	No	No	No	No	No	No	No	No	No
12	2	371	2	54	No	No	No	No	No	No	No	No	No	No
13	2	337	2	49	No	No	No	No	No	No	No	No	No	No
14	2	311	2	45	No	No	No	No	No	No	No	No	No	No
15	2	311	2	45	No	No	No	No	No	No	No	No	No	No
16	2	302	2	44	No	No	No	No	No	No	No	No	No	No
17	2	172	2	25	No	No	No	No	No	No	No	No	No	No
18	2	94	2	14	No	No	No	No	No	No	No	No	No	No
19	2	87	2	13	No	No	No	No	No	No	No	No	No	No
20	2	34	2	5	No	No	No	No	No	No	No	No	No	No
21	2	26	2	3	No	No	No	No	No	No	No	No	No	No
22	2	26	2	3	No	No	No	No	No	No	No	No	No	No
23	2	18	2	2	No	No	No	No	No	No	No	No	No	No
24	2	18	2	2	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	3	5	0	3	5	8	3	0

Warrant 3 Condition A

Orientation	S	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	29.2	13.4
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:05	0:25
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	11	115
High Minor Volume Condition Met	No	Yes
Total Entering Volume on All Approaches During Same Hour	989	989
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Yes	Yes
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	

Signal Warrants Report For Intersection 12: Ethanac Rd @ Dawson Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	E	W	S
1	355	401	2
2	341	385	2
3	334	377	2
4	284	321	2
5	270	305	2
6	241	273	1
7	224	253	1
8	213	241	1
9	170	192	1
10	160	180	1
11	160	180	1
12	153	172	1
13	138	156	1
14	128	144	1
15	128	144	1
16	124	140	1
17	71	80	0
18	39	44	0
19	36	40	0
20	14	16	0
21	11	12	0
22	11	12	0
23	7	8	0
24	7	8	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	756	1	2	No	No	No	No	No	No	No	No	No	No
2	2	726	1	2	No	No	No	No	No	No	No	No	No	No
3	2	711	1	2	No	No	No	No	No	No	No	No	No	No
4	2	605	1	2	No	No	No	No	No	No	No	No	No	No
5	2	575	1	2	No	No	No	No	No	No	No	No	No	No
6	2	514	1	1	No	No	No	No	No	No	No	No	No	No
7	2	477	1	1	No	No	No	No	No	No	No	No	No	No
8	2	454	1	1	No	No	No	No	No	No	No	No	No	No
9	2	362	1	1	No	No	No	No	No	No	No	No	No	No
10	2	340	1	1	No	No	No	No	No	No	No	No	No	No
11	2	340	1	1	No	No	No	No	No	No	No	No	No	No
12	2	325	1	1	No	No	No	No	No	No	No	No	No	No
13	2	294	1	1	No	No	No	No	No	No	No	No	No	No
14	2	272	1	1	No	No	No	No	No	No	No	No	No	No
15	2	272	1	1	No	No	No	No	No	No	No	No	No	No
16	2	264	1	1	No	No	No	No	No	No	No	No	No	No
17	2	151	1	0	No	No	No	No	No	No	No	No	No	No
18	2	83	1	0	No	No	No	No	No	No	No	No	No	No
19	2	76	1	0	No	No	No	No	No	No	No	No	No	No
20	2	30	1	0	No	No	No	No	No	No	No	No	No	No
21	2	23	1	0	No	No	No	No	No	No	No	No	No	No
22	2	23	1	0	No	No	No	No	No	No	No	No	No	No
23	2	15	1	0	No	No	No	No	No	No	No	No	No	No
24	2	15	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	10.7
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:00
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	2
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	758
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 13: Ethanac Rd @ Antelope Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S, NW
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	E	W	S	NW
1	391	424	11	17
2	375	407	11	16
3	368	399	10	16
4	313	339	9	14
5	297	322	8	13
6	266	288	7	12
7	246	267	7	11
8	235	254	7	10
9	188	204	5	8
10	176	191	5	8
11	176	191	5	8
12	168	182	5	7
13	152	165	4	7
14	141	153	4	6
15	141	153	4	6
16	137	148	4	6
17	78	85	2	3
18	43	47	1	2
19	39	42	1	2
20	16	17	0	1
21	12	13	0	1
22	12	13	0	1
23	8	8	0	0
24	8	8	0	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	3	815	2	28	No	No	No	No	No	No	No	No	No	No
2	3	782	2	27	No	No	No	No	No	No	No	No	No	No
3	3	767	2	26	No	No	No	No	No	No	No	No	No	No
4	3	652	2	23	No	No	No	No	No	No	No	No	No	No
5	3	619	2	21	No	No	No	No	No	No	No	No	No	No
6	3	554	2	19	No	No	No	No	No	No	No	No	No	No
7	3	513	2	18	No	No	No	No	No	No	No	No	No	No
8	3	489	2	17	No	No	No	No	No	No	No	No	No	No
9	3	392	2	13	No	No	No	No	No	No	No	No	No	No
10	3	367	2	13	No	No	No	No	No	No	No	No	No	No
11	3	367	2	13	No	No	No	No	No	No	No	No	No	No
12	3	350	2	12	No	No	No	No	No	No	No	No	No	No
13	3	317	2	11	No	No	No	No	No	No	No	No	No	No
14	3	294	2	10	No	No	No	No	No	No	No	No	No	No
15	3	294	2	10	No	No	No	No	No	No	No	No	No	No
16	3	285	2	10	No	No	No	No	No	No	No	No	No	No
17	3	163	2	5	No	No	No	No	No	No	No	No	No	No
18	3	90	2	3	No	No	No	No	No	No	No	No	No	No
19	3	81	2	3	No	No	No	No	No	No	No	No	No	No
20	3	33	2	1	No	No	No	No	No	No	No	No	No	No
21	3	25	2	1	No	No	No	No	No	No	No	No	No	No
22	3	25	2	1	No	No	No	No	No	No	No	No	No	No
23	3	16	2	0	No	No	No	No	No	No	No	No	No	No
24	3	16	2	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	S	NW
Total Stopped Delay Per Vehicle on Minor Approach (s)	16.7	18.5
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:03	0:05
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	11	17
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	843	843
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Yes	Yes
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	

Signal Warrants Report For Intersection 17: Matthews Rd @ Palomar Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	Yes
#2	Four Hour Vehicular Volume	Yes
#3	Peak Hour	Yes

Intersection Warrants Parameters

Major Approaches	SE, NW
Minor Approaches	N
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	SE	NW	N
1	343	441	233
2	329	423	224
3	322	415	219
4	274	353	186
5	261	335	177
6	233	300	158
7	216	278	147
8	206	265	140
9	165	212	112
10	154	198	105
11	154	198	105
12	147	190	100
13	134	172	91
14	123	159	84
15	123	159	84
16	120	154	82
17	69	88	47
18	38	49	26
19	34	44	23
20	14	18	9
21	10	13	7
22	10	13	7
23	7	9	5
24	7	9	5

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	784	2	233	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
2	2	752	2	224	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
3	2	737	2	219	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
4	2	627	2	186	No	Yes	Yes	Yes	No	No	No	Yes	Yes	No
5	2	596	2	177	No	Yes	Yes	Yes	No	No	No	Yes	No	No
6	2	533	2	158	No	No	Yes	Yes	No	No	No	Yes	No	No
7	2	494	2	147	No	No	Yes	Yes	No	No	No	No	No	No
8	2	471	2	140	No	No	Yes	Yes	No	No	No	No	No	No
9	2	377	2	112	No	No	No	Yes	No	No	No	No	No	No
10	2	352	2	105	No	No	No	No	No	No	No	No	No	No
11	2	352	2	105	No	No	No	No	No	No	No	No	No	No
12	2	337	2	100	No	No	No	No	No	No	No	No	No	No
13	2	306	2	91	No	No	No	No	No	No	No	No	No	No
14	2	282	2	84	No	No	No	No	No	No	No	No	No	No
15	2	282	2	84	No	No	No	No	No	No	No	No	No	No
16	2	274	2	82	No	No	No	No	No	No	No	No	No	No
17	2	157	2	47	No	No	No	No	No	No	No	No	No	No
18	2	87	2	26	No	No	No	No	No	No	No	No	No	No
19	2	78	2	23	No	No	No	No	No	No	No	No	No	No
20	2	32	2	9	No	No	No	No	No	No	No	No	No	No
21	2	23	2	7	No	No	No	No	No	No	No	No	No	No
22	2	23	2	7	No	No	No	No	No	No	No	No	No	No
23	2	16	2	5	No	No	No	No	No	No	No	No	No	No
24	2	16	2	5	No	No	No	No	No	No	No	No	No	No
Hours Met					3	5	8	9	0	3	3	6	4	1

Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	16
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	1:02
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	233
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	1017
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 18: McLaughlin Rd @ Murrieta Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E, W
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	S	N	E	W
1	303	238	17	6
2	291	228	16	6
3	285	224	16	6
4	242	190	14	5
5	230	181	13	5
6	206	162	12	4
7	191	150	11	4
8	182	143	10	4
9	145	114	8	3
10	136	107	8	3
11	136	107	8	3
12	130	102	7	3
13	118	93	7	2
14	109	86	6	2
15	109	86	6	2
16	106	83	6	2
17	61	48	3	1
18	33	26	2	1
19	30	24	2	1
20	12	10	1	0
21	9	7	1	0
22	9	7	1	0
23	6	5	0	0
24	6	5	0	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	4	541	2	23	No	No	No	No	No	No	No	No	No	No
2	4	519	2	22	No	No	No	No	No	No	No	No	No	No
3	4	509	2	22	No	No	No	No	No	No	No	No	No	No
4	4	432	2	19	No	No	No	No	No	No	No	No	No	No
5	4	411	2	18	No	No	No	No	No	No	No	No	No	No
6	4	368	2	16	No	No	No	No	No	No	No	No	No	No
7	4	341	2	15	No	No	No	No	No	No	No	No	No	No
8	4	325	2	14	No	No	No	No	No	No	No	No	No	No
9	4	259	2	11	No	No	No	No	No	No	No	No	No	No
10	4	243	2	11	No	No	No	No	No	No	No	No	No	No
11	4	243	2	11	No	No	No	No	No	No	No	No	No	No
12	4	232	2	10	No	No	No	No	No	No	No	No	No	No
13	4	211	2	9	No	No	No	No	No	No	No	No	No	No
14	4	195	2	8	No	No	No	No	No	No	No	No	No	No
15	4	195	2	8	No	No	No	No	No	No	No	No	No	No
16	4	189	2	8	No	No	No	No	No	No	No	No	No	No
17	4	109	2	4	No	No	No	No	No	No	No	No	No	No
18	4	59	2	3	No	No	No	No	No	No	No	No	No	No
19	4	54	2	3	No	No	No	No	No	No	No	No	No	No
20	4	22	2	1	No	No	No	No	No	No	No	No	No	No
21	4	16	2	1	No	No	No	No	No	No	No	No	No	No
22	4	16	2	1	No	No	No	No	No	No	No	No	No	No
23	4	11	2	0	No	No	No	No	No	No	No	No	No	No
24	4	11	2	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	10.9	13.2
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:03	0:01
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	17	6
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	564	564
Number of Approaches on Intersection	4	4
Total Volume Condition Met	No	No
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	

Signal Warrants Report For Intersection 19: McLaughlin Rd @ Encanto Dr

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	E
1	191	225	45
2	183	216	43
3	180	212	42
4	153	180	36
5	145	171	34
6	130	153	31
7	120	142	28
8	115	135	27
9	92	108	22
10	86	101	20
11	86	101	20
12	82	97	19
13	74	88	18
14	69	81	16
15	69	81	16
16	67	79	16
17	38	45	9
18	21	25	5
19	19	23	5
20	8	9	2
21	6	7	1
22	6	7	1
23	4	5	1
24	4	5	1

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	416	1	45	No	No	No	No	No	No	No	No	No	No
2	2	399	1	43	No	No	No	No	No	No	No	No	No	No
3	2	392	1	42	No	No	No	No	No	No	No	No	No	No
4	2	333	1	36	No	No	No	No	No	No	No	No	No	No
5	2	316	1	34	No	No	No	No	No	No	No	No	No	No
6	2	283	1	31	No	No	No	No	No	No	No	No	No	No
7	2	262	1	28	No	No	No	No	No	No	No	No	No	No
8	2	250	1	27	No	No	No	No	No	No	No	No	No	No
9	2	200	1	22	No	No	No	No	No	No	No	No	No	No
10	2	187	1	20	No	No	No	No	No	No	No	No	No	No
11	2	187	1	20	No	No	No	No	No	No	No	No	No	No
12	2	179	1	19	No	No	No	No	No	No	No	No	No	No
13	2	162	1	18	No	No	No	No	No	No	No	No	No	No
14	2	150	1	16	No	No	No	No	No	No	No	No	No	No
15	2	150	1	16	No	No	No	No	No	No	No	No	No	No
16	2	146	1	16	No	No	No	No	No	No	No	No	No	No
17	2	83	1	9	No	No	No	No	No	No	No	No	No	No
18	2	46	1	5	No	No	No	No	No	No	No	No	No	No
19	2	42	1	5	No	No	No	No	No	No	No	No	No	No
20	2	17	1	2	No	No	No	No	No	No	No	No	No	No
21	2	13	1	1	No	No	No	No	No	No	No	No	No	No
22	2	13	1	1	No	No	No	No	No	No	No	No	No	No
23	2	9	1	1	No	No	No	No	No	No	No	No	No	No
24	2	9	1	1	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E
Total Stopped Delay Per Vehicle on Minor Approach (s)	11
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:08
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	45
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	461
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 20: McLaughlin Rd @ Trumble Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E, W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	S	N	E	W
1	39	7	0	21
2	37	7	0	20
3	37	7	0	20
4	31	6	0	17
5	30	5	0	16
6	27	5	0	14
7	25	4	0	13
8	23	4	0	13
9	19	3	0	10
10	18	3	0	9
11	18	3	0	9
12	17	3	0	9
13	15	3	0	8
14	14	3	0	8
15	14	3	0	8
16	14	2	0	7
17	8	1	0	4
18	4	1	0	2
19	4	1	0	2
20	2	0	0	1
21	1	0	0	1
22	1	0	0	1
23	1	0	0	0
24	1	0	0	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	46	2	21	No	No	No	No	No	No	No	No	No	No
2	2	44	2	20	No	No	No	No	No	No	No	No	No	No
3	2	44	2	20	No	No	No	No	No	No	No	No	No	No
4	2	37	2	17	No	No	No	No	No	No	No	No	No	No
5	2	35	2	16	No	No	No	No	No	No	No	No	No	No
6	2	32	2	14	No	No	No	No	No	No	No	No	No	No
7	2	29	2	13	No	No	No	No	No	No	No	No	No	No
8	2	27	2	13	No	No	No	No	No	No	No	No	No	No
9	2	22	2	10	No	No	No	No	No	No	No	No	No	No
10	2	21	2	9	No	No	No	No	No	No	No	No	No	No
11	2	21	2	9	No	No	No	No	No	No	No	No	No	No
12	2	20	2	9	No	No	No	No	No	No	No	No	No	No
13	2	18	2	8	No	No	No	No	No	No	No	No	No	No
14	2	17	2	8	No	No	No	No	No	No	No	No	No	No
15	2	17	2	8	No	No	No	No	No	No	No	No	No	No
16	2	16	2	7	No	No	No	No	No	No	No	No	No	No
17	2	9	2	4	No	No	No	No	No	No	No	No	No	No
18	2	5	2	2	No	No	No	No	No	No	No	No	No	No
19	2	5	2	2	No	No	No	No	No	No	No	No	No	No
20	2	2	2	1	No	No	No	No	No	No	No	No	No	No
21	2	1	2	1	No	No	No	No	No	No	No	No	No	No
22	2	1	2	1	No	No	No	No	No	No	No	No	No	No
23	2	1	2	0	No	No	No	No	No	No	No	No	No	No
24	2	1	2	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E	W
Total Stopped Delay Per Vehicle on Minor Approach (s)		6.8
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:00	0:02
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	0	21
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	67	67
Number of Approaches on Intersection	4	4
Total Volume Condition Met	No	No
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	

Signal Warrants Report For Intersection 21: McLaughlin Rd @ Sherman Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E, W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	S	N	E	W
1	0	0	0	1
2	0	0	0	1
3	0	0	0	1
4	0	0	0	1
5	0	0	0	1
6	0	0	0	1
7	0	0	0	1
8	0	0	0	1
9	0	0	0	0
10	0	0	0	0
11	0	0	0	0
12	0	0	0	0
13	0	0	0	0
14	0	0	0	0
15	0	0	0	0
16	0	0	0	0
17	0	0	0	0
18	0	0	0	0
19	0	0	0	0
20	0	0	0	0
21	0	0	0	0
22	0	0	0	0
23	0	0	0	0
24	0	0	0	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	0	2	1	No	No	No	No	No	No	No	No	No	No
2	2	0	2	1	No	No	No	No	No	No	No	No	No	No
3	2	0	2	1	No	No	No	No	No	No	No	No	No	No
4	2	0	2	1	No	No	No	No	No	No	No	No	No	No
5	2	0	2	1	No	No	No	No	No	No	No	No	No	No
6	2	0	2	1	No	No	No	No	No	No	No	No	No	No
7	2	0	2	1	No	No	No	No	No	No	No	No	No	No
8	2	0	2	1	No	No	No	No	No	No	No	No	No	No
9	2	0	2	0	No	No	No	No	No	No	No	No	No	No
10	2	0	2	0	No	No	No	No	No	No	No	No	No	No
11	2	0	2	0	No	No	No	No	No	No	No	No	No	No
12	2	0	2	0	No	No	No	No	No	No	No	No	No	No
13	2	0	2	0	No	No	No	No	No	No	No	No	No	No
14	2	0	2	0	No	No	No	No	No	No	No	No	No	No
15	2	0	2	0	No	No	No	No	No	No	No	No	No	No
16	2	0	2	0	No	No	No	No	No	No	No	No	No	No
17	2	0	2	0	No	No	No	No	No	No	No	No	No	No
18	2	0	2	0	No	No	No	No	No	No	No	No	No	No
19	2	0	2	0	No	No	No	No	No	No	No	No	No	No
20	2	0	2	0	No	No	No	No	No	No	No	No	No	No
21	2	0	2	0	No	No	No	No	No	No	No	No	No	No
22	2	0	2	0	No	No	No	No	No	No	No	No	No	No
23	2	0	2	0	No	No	No	No	No	No	No	No	No	No
24	2	0	2	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	8.6	8.3
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:00	0:00
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	0	1
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	1	1
Number of Approaches on Intersection	4	4
Total Volume Condition Met	No	No
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	

Signal Warrants Report For Intersection 22: Rouse Rd @ Murrieta Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E, W
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	S	N	E	W
1	263	253	64	31
2	252	243	61	30
3	247	238	60	29
4	210	202	51	25
5	200	192	49	24
6	179	172	44	21
7	166	159	40	20
8	158	152	38	19
9	126	121	31	15
10	118	114	29	14
11	118	114	29	14
12	113	109	28	13
13	103	99	25	12
14	95	91	23	11
15	95	91	23	11
16	92	89	22	11
17	53	51	13	6
18	29	28	7	3
19	26	25	6	3
20	11	10	3	1
21	8	8	2	1
22	8	8	2	1
23	5	5	1	1
24	5	5	1	1

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	6	516	6	95	No	No	No	No	No	No	No	Yes	No	No
2	6	495	6	91	No	No	No	No	No	No	No	No	No	No
3	6	485	6	89	No	No	No	No	No	No	No	No	No	No
4	6	412	6	76	No	No	No	No	No	No	No	No	No	No
5	6	392	6	73	No	No	No	No	No	No	No	No	No	No
6	6	351	6	65	No	No	No	No	No	No	No	No	No	No
7	6	325	6	60	No	No	No	No	No	No	No	No	No	No
8	6	310	6	57	No	No	No	No	No	No	No	No	No	No
9	6	247	6	46	No	No	No	No	No	No	No	No	No	No
10	6	232	6	43	No	No	No	No	No	No	No	No	No	No
11	6	232	6	43	No	No	No	No	No	No	No	No	No	No
12	6	222	6	41	No	No	No	No	No	No	No	No	No	No
13	6	202	6	37	No	No	No	No	No	No	No	No	No	No
14	6	186	6	34	No	No	No	No	No	No	No	No	No	No
15	6	186	6	34	No	No	No	No	No	No	No	No	No	No
16	6	181	6	33	No	No	No	No	No	No	No	No	No	No
17	6	104	6	19	No	No	No	No	No	No	No	No	No	No
18	6	57	6	10	No	No	No	No	No	No	No	No	No	No
19	6	51	6	9	No	No	No	No	No	No	No	No	No	No
20	6	21	6	4	No	No	No	No	No	No	No	No	No	No
21	6	16	6	3	No	No	No	No	No	No	No	No	No	No
22	6	16	6	3	No	No	No	No	No	No	No	No	No	No
23	6	10	6	2	No	No	No	No	No	No	No	No	No	No
24	6	10	6	2	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	1	0	0

Warrant 3 Condition A

Orientation	E	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	11	13
Number of Lanes on Minor Street Approach	3	3
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:11	0:06
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	64	31
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	611	611
Number of Approaches on Intersection	4	4
Total Volume Condition Met	No	No
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	

Signal Warrants Report For Intersection 23: Rouse Rd @ Encanto Dr

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	E
1	236	169	121
2	227	162	116
3	222	159	114
4	189	135	97
5	179	128	92
6	160	115	82
7	149	106	76
8	142	101	73
9	113	81	58
10	106	76	54
11	106	76	54
12	101	73	52
13	92	66	47
14	85	61	44
15	85	61	44
16	83	59	42
17	47	34	24
18	26	19	13
19	24	17	12
20	9	7	5
21	7	5	4
22	7	5	4
23	5	3	2
24	5	3	2

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	405	1	121	No	No	No	Yes	No	No	No	No	No	No
2	2	389	1	116	No	No	No	Yes	No	No	No	No	No	No
3	2	381	1	114	No	No	No	Yes	No	No	No	No	No	No
4	2	324	1	97	No	No	No	No	No	No	No	No	No	No
5	2	307	1	92	No	No	No	No	No	No	No	No	No	No
6	2	275	1	82	No	No	No	No	No	No	No	No	No	No
7	2	255	1	76	No	No	No	No	No	No	No	No	No	No
8	2	243	1	73	No	No	No	No	No	No	No	No	No	No
9	2	194	1	58	No	No	No	No	No	No	No	No	No	No
10	2	182	1	54	No	No	No	No	No	No	No	No	No	No
11	2	182	1	54	No	No	No	No	No	No	No	No	No	No
12	2	174	1	52	No	No	No	No	No	No	No	No	No	No
13	2	158	1	47	No	No	No	No	No	No	No	No	No	No
14	2	146	1	44	No	No	No	No	No	No	No	No	No	No
15	2	146	1	44	No	No	No	No	No	No	No	No	No	No
16	2	142	1	42	No	No	No	No	No	No	No	No	No	No
17	2	81	1	24	No	No	No	No	No	No	No	No	No	No
18	2	45	1	13	No	No	No	No	No	No	No	No	No	No
19	2	41	1	12	No	No	No	No	No	No	No	No	No	No
20	2	16	1	5	No	No	No	No	No	No	No	No	No	No
21	2	12	1	4	No	No	No	No	No	No	No	No	No	No
22	2	12	1	4	No	No	No	No	No	No	No	No	No	No
23	2	8	1	2	No	No	No	No	No	No	No	No	No	No
24	2	8	1	2	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	3	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E
Total Stopped Delay Per Vehicle on Minor Approach (s)	13.5
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:27
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	121
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	526
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 9: Ethanac Rd @ Encanto Dr

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	Yes
#2	Four Hour Vehicular Volume	Yes
#3	Peak Hour	Yes

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	E	W	S
1	456	630	205
2	438	605	197
3	429	592	193
4	365	504	164
5	347	479	156
6	310	428	139
7	287	397	129
8	274	378	123
9	219	302	98
10	205	284	92
11	205	284	92
12	196	271	88
13	178	246	80
14	164	227	74
15	164	227	74
16	160	221	72
17	91	126	41
18	50	69	23
19	46	63	21
20	18	25	8
21	14	19	6
22	14	19	6
23	9	13	4
24	9	13	4

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	3	1086	1	205	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	3	1043	1	197	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	3	1021	1	193	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	3	869	1	164	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
5	3	826	1	156	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
6	3	738	1	139	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
7	3	684	1	129	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No
8	3	652	1	123	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No
9	3	521	1	98	No	No	No	Yes	No	No	No	Yes	No	No
10	3	489	1	92	No	No	No	Yes	No	No	No	No	No	No
11	3	489	1	92	No	No	No	Yes	No	No	No	No	No	No
12	3	467	1	88	No	No	No	Yes	No	No	No	No	No	No
13	3	424	1	80	No	No	No	No	No	No	No	No	No	No
14	3	391	1	74	No	No	No	No	No	No	No	No	No	No
15	3	391	1	74	No	No	No	No	No	No	No	No	No	No
16	3	381	1	72	No	No	No	No	No	No	No	No	No	No
17	3	217	1	41	No	No	No	No	No	No	No	No	No	No
18	3	119	1	23	No	No	No	No	No	No	No	No	No	No
19	3	109	1	21	No	No	No	No	No	No	No	No	No	No
20	3	43	1	8	No	No	No	No	No	No	No	No	No	No
21	3	33	1	6	No	No	No	No	No	No	No	No	No	No
22	3	33	1	6	No	No	No	No	No	No	No	No	No	No
23	3	22	1	4	No	No	No	No	No	No	No	No	No	No
24	3	22	1	4	No	No	No	No	No	No	No	No	No	No
Hours Met					5	8	8	12	3	6	8	9	8	4

Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	50.9
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	2:53
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	205
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	1291
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 11: Ethanac Rd @ Sherman Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S, N
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	E	W	S	N
1	255	520	33	103
2	245	499	32	99
3	240	489	31	97
4	204	416	26	82
5	194	395	25	78
6	173	354	22	70
7	161	328	21	65
8	153	312	20	62
9	122	250	16	49
10	115	234	15	46
11	115	234	15	46
12	110	224	14	44
13	99	203	13	40
14	92	187	12	37
15	92	187	12	37
16	89	182	12	36
17	51	104	7	21
18	28	57	4	11
19	26	52	3	10
20	10	21	1	4
21	8	16	1	3
22	8	16	1	3
23	5	10	1	2
24	5	10	1	2

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	775	2	136	No	No	No	Yes	No	Yes	Yes	Yes	Yes	No
2	2	744	2	131	No	No	No	Yes	No	Yes	Yes	Yes	Yes	No
3	2	729	2	128	No	No	No	Yes	No	Yes	Yes	Yes	Yes	No
4	2	620	2	108	No	No	No	No	No	No	No	Yes	No	No
5	2	589	2	103	No	No	No	No	No	No	No	Yes	No	No
6	2	527	2	92	No	No	No	No	No	No	No	Yes	No	No
7	2	489	2	86	No	No	No	No	No	No	No	No	No	No
8	2	465	2	82	No	No	No	No	No	No	No	No	No	No
9	2	372	2	65	No	No	No	No	No	No	No	No	No	No
10	2	349	2	61	No	No	No	No	No	No	No	No	No	No
11	2	349	2	61	No	No	No	No	No	No	No	No	No	No
12	2	334	2	58	No	No	No	No	No	No	No	No	No	No
13	2	302	2	53	No	No	No	No	No	No	No	No	No	No
14	2	279	2	49	No	No	No	No	No	No	No	No	No	No
15	2	279	2	49	No	No	No	No	No	No	No	No	No	No
16	2	271	2	48	No	No	No	No	No	No	No	No	No	No
17	2	155	2	28	No	No	No	No	No	No	No	No	No	No
18	2	85	2	15	No	No	No	No	No	No	No	No	No	No
19	2	78	2	13	No	No	No	No	No	No	No	No	No	No
20	2	31	2	5	No	No	No	No	No	No	No	No	No	No
21	2	24	2	4	No	No	No	No	No	No	No	No	No	No
22	2	24	2	4	No	No	No	No	No	No	No	No	No	No
23	2	15	2	3	No	No	No	No	No	No	No	No	No	No
24	2	15	2	3	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	3	0	3	3	6	3	0

Warrant 3 Condition A

Orientation	S	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	28.4	11.7
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:15	0:20
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	33	103
High Minor Volume Condition Met	No	Yes
Total Entering Volume on All Approaches During Same Hour	911	911
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Yes	Yes
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	

Signal Warrants Report For Intersection 12: Ethanac Rd @ Dawson Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	E	W	S
1	257	374	1
2	247	359	1
3	242	352	1
4	206	299	1
5	195	284	1
6	175	254	1
7	162	236	1
8	154	224	1
9	123	180	0
10	116	168	0
11	116	168	0
12	111	161	0
13	100	146	0
14	93	135	0
15	93	135	0
16	90	131	0
17	51	75	0
18	28	41	0
19	26	37	0
20	10	15	0
21	8	11	0
22	8	11	0
23	5	7	0
24	5	7	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	631	1	1	No	No	No	No	No	No	No	No	No	No
2	2	606	1	1	No	No	No	No	No	No	No	No	No	No
3	2	594	1	1	No	No	No	No	No	No	No	No	No	No
4	2	505	1	1	No	No	No	No	No	No	No	No	No	No
5	2	479	1	1	No	No	No	No	No	No	No	No	No	No
6	2	429	1	1	No	No	No	No	No	No	No	No	No	No
7	2	398	1	1	No	No	No	No	No	No	No	No	No	No
8	2	378	1	1	No	No	No	No	No	No	No	No	No	No
9	2	303	1	0	No	No	No	No	No	No	No	No	No	No
10	2	284	1	0	No	No	No	No	No	No	No	No	No	No
11	2	284	1	0	No	No	No	No	No	No	No	No	No	No
12	2	272	1	0	No	No	No	No	No	No	No	No	No	No
13	2	246	1	0	No	No	No	No	No	No	No	No	No	No
14	2	228	1	0	No	No	No	No	No	No	No	No	No	No
15	2	228	1	0	No	No	No	No	No	No	No	No	No	No
16	2	221	1	0	No	No	No	No	No	No	No	No	No	No
17	2	126	1	0	No	No	No	No	No	No	No	No	No	No
18	2	69	1	0	No	No	No	No	No	No	No	No	No	No
19	2	63	1	0	No	No	No	No	No	No	No	No	No	No
20	2	25	1	0	No	No	No	No	No	No	No	No	No	No
21	2	19	1	0	No	No	No	No	No	No	No	No	No	No
22	2	19	1	0	No	No	No	No	No	No	No	No	No	No
23	2	12	1	0	No	No	No	No	No	No	No	No	No	No
24	2	12	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	10.7
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:00
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	1
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	632
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 13: Ethanac Rd @ Antelope Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S, NW
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	E	W	S	NW
1	230	331	50	15
2	221	318	48	14
3	216	311	47	14
4	184	265	40	12
5	175	252	38	11
6	156	225	34	10
7	145	209	32	9
8	138	199	30	9
9	110	159	24	7
10	104	149	23	7
11	104	149	23	7
12	99	142	22	6
13	90	129	20	6
14	83	119	18	5
15	83	119	18	5
16	81	116	18	5
17	46	66	10	3
18	25	36	6	2
19	23	33	5	2
20	9	13	2	1
21	7	10	2	0
22	7	10	2	0
23	5	7	1	0
24	5	7	1	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	3	561	2	65	No	No	No	No	No	No	No	Yes	No	No
2	3	539	2	62	No	No	No	No	No	No	No	Yes	No	No
3	3	527	2	61	No	No	No	No	No	No	No	Yes	No	No
4	3	449	2	52	No	No	No	No	No	No	No	No	No	No
5	3	427	2	49	No	No	No	No	No	No	No	No	No	No
6	3	381	2	44	No	No	No	No	No	No	No	No	No	No
7	3	354	2	41	No	No	No	No	No	No	No	No	No	No
8	3	337	2	39	No	No	No	No	No	No	No	No	No	No
9	3	269	2	31	No	No	No	No	No	No	No	No	No	No
10	3	253	2	30	No	No	No	No	No	No	No	No	No	No
11	3	253	2	30	No	No	No	No	No	No	No	No	No	No
12	3	241	2	28	No	No	No	No	No	No	No	No	No	No
13	3	219	2	26	No	No	No	No	No	No	No	No	No	No
14	3	202	2	23	No	No	No	No	No	No	No	No	No	No
15	3	202	2	23	No	No	No	No	No	No	No	No	No	No
16	3	197	2	23	No	No	No	No	No	No	No	No	No	No
17	3	112	2	13	No	No	No	No	No	No	No	No	No	No
18	3	61	2	8	No	No	No	No	No	No	No	No	No	No
19	3	56	2	7	No	No	No	No	No	No	No	No	No	No
20	3	22	2	3	No	No	No	No	No	No	No	No	No	No
21	3	17	2	2	No	No	No	No	No	No	No	No	No	No
22	3	17	2	2	No	No	No	No	No	No	No	No	No	No
23	3	12	2	1	No	No	No	No	No	No	No	No	No	No
24	3	12	2	1	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	3	0	0

Warrant 3 Condition A

Orientation	S	NW
Total Stopped Delay Per Vehicle on Minor Approach (s)	13.9	15
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:11	0:03
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	50	15
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	626	626
Number of Approaches on Intersection	4	4
Total Volume Condition Met	No	No
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	

Signal Warrants Report For Intersection 17: Matthews Rd @ Palomar Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	SE, NW
Minor Approaches	N
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	SE	NW	N
1	133	354	204
2	128	340	196
3	125	333	192
4	106	283	163
5	101	269	155
6	90	241	139
7	84	223	129
8	80	212	122
9	64	170	98
10	60	159	92
11	60	159	92
12	57	152	88
13	52	138	80
14	48	127	73
15	48	127	73
16	47	124	71
17	27	71	41
18	15	39	22
19	13	35	20
20	5	14	8
21	4	11	6
22	4	11	6
23	3	7	4
24	3	7	4

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	487	2	204	No	Yes	Yes	Yes	No	No	No	No	No	No
2	2	468	2	196	No	No	Yes	Yes	No	No	No	No	No	No
3	2	458	2	192	No	No	Yes	Yes	No	No	No	No	No	No
4	2	389	2	163	No	No	No	Yes	No	No	No	No	No	No
5	2	370	2	155	No	No	No	Yes	No	No	No	No	No	No
6	2	331	2	139	No	No	No	No	No	No	No	No	No	No
7	2	307	2	129	No	No	No	No	No	No	No	No	No	No
8	2	292	2	122	No	No	No	No	No	No	No	No	No	No
9	2	234	2	98	No	No	No	No	No	No	No	No	No	No
10	2	219	2	92	No	No	No	No	No	No	No	No	No	No
11	2	219	2	92	No	No	No	No	No	No	No	No	No	No
12	2	209	2	88	No	No	No	No	No	No	No	No	No	No
13	2	190	2	80	No	No	No	No	No	No	No	No	No	No
14	2	175	2	73	No	No	No	No	No	No	No	No	No	No
15	2	175	2	73	No	No	No	No	No	No	No	No	No	No
16	2	171	2	71	No	No	No	No	No	No	No	No	No	No
17	2	98	2	41	No	No	No	No	No	No	No	No	No	No
18	2	54	2	22	No	No	No	No	No	No	No	No	No	No
19	2	48	2	20	No	No	No	No	No	No	No	No	No	No
20	2	19	2	8	No	No	No	No	No	No	No	No	No	No
21	2	15	2	6	No	No	No	No	No	No	No	No	No	No
22	2	15	2	6	No	No	No	No	No	No	No	No	No	No
23	2	10	2	4	No	No	No	No	No	No	No	No	No	No
24	2	10	2	4	No	No	No	No	No	No	No	No	No	No
Hours Met					0	1	3	5	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	11.1
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:37
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	204
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	691
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 18: McLaughlin Rd @ Murrieta Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E, W
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	S	N	E	W
1	388	518	16	12
2	372	497	15	12
3	365	487	15	11
4	310	414	13	10
5	295	394	12	9
6	264	352	11	8
7	244	326	10	8
8	233	311	10	7
9	186	249	8	6
10	175	233	7	5
11	175	233	7	5
12	167	223	7	5
13	151	202	6	5
14	140	186	6	4
15	140	186	6	4
16	136	181	6	4
17	78	104	3	2
18	43	57	2	1
19	39	52	2	1
20	16	21	1	0
21	12	16	0	0
22	12	16	0	0
23	8	10	0	0
24	8	10	0	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	4	906	2	28	No	No	No	No	No	No	No	No	No	No
2	4	869	2	27	No	No	No	No	No	No	No	No	No	No
3	4	852	2	26	No	No	No	No	No	No	No	No	No	No
4	4	724	2	23	No	No	No	No	No	No	No	No	No	No
5	4	689	2	21	No	No	No	No	No	No	No	No	No	No
6	4	616	2	19	No	No	No	No	No	No	No	No	No	No
7	4	570	2	18	No	No	No	No	No	No	No	No	No	No
8	4	544	2	17	No	No	No	No	No	No	No	No	No	No
9	4	435	2	14	No	No	No	No	No	No	No	No	No	No
10	4	408	2	12	No	No	No	No	No	No	No	No	No	No
11	4	408	2	12	No	No	No	No	No	No	No	No	No	No
12	4	390	2	12	No	No	No	No	No	No	No	No	No	No
13	4	353	2	11	No	No	No	No	No	No	No	No	No	No
14	4	326	2	10	No	No	No	No	No	No	No	No	No	No
15	4	326	2	10	No	No	No	No	No	No	No	No	No	No
16	4	317	2	10	No	No	No	No	No	No	No	No	No	No
17	4	182	2	5	No	No	No	No	No	No	No	No	No	No
18	4	100	2	3	No	No	No	No	No	No	No	No	No	No
19	4	91	2	3	No	No	No	No	No	No	No	No	No	No
20	4	37	2	1	No	No	No	No	No	No	No	No	No	No
21	4	28	2	0	No	No	No	No	No	No	No	No	No	No
22	4	28	2	0	No	No	No	No	No	No	No	No	No	No
23	4	18	2	0	No	No	No	No	No	No	No	No	No	No
24	4	18	2	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	13.4	16.2
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:03	0:03
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	16	12
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	934	934
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Yes	Yes
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	

Signal Warrants Report For Intersection 19: McLaughlin Rd @ Encanto Dr

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	E
1	128	155	50
2	123	149	48
3	120	146	47
4	102	124	40
5	97	118	38
6	87	105	34
7	81	98	32
8	77	93	30
9	61	74	24
10	58	70	23
11	58	70	23
12	55	67	22
13	50	60	20
14	46	56	18
15	46	56	18
16	45	54	18
17	26	31	10
18	14	17	6
19	13	16	5
20	5	6	2
21	4	5	2
22	4	5	2
23	3	3	1
24	3	3	1

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	283	1	50	No	No	No	No	No	No	No	No	No	No
2	2	272	1	48	No	No	No	No	No	No	No	No	No	No
3	2	266	1	47	No	No	No	No	No	No	No	No	No	No
4	2	226	1	40	No	No	No	No	No	No	No	No	No	No
5	2	215	1	38	No	No	No	No	No	No	No	No	No	No
6	2	192	1	34	No	No	No	No	No	No	No	No	No	No
7	2	179	1	32	No	No	No	No	No	No	No	No	No	No
8	2	170	1	30	No	No	No	No	No	No	No	No	No	No
9	2	135	1	24	No	No	No	No	No	No	No	No	No	No
10	2	128	1	23	No	No	No	No	No	No	No	No	No	No
11	2	128	1	23	No	No	No	No	No	No	No	No	No	No
12	2	122	1	22	No	No	No	No	No	No	No	No	No	No
13	2	110	1	20	No	No	No	No	No	No	No	No	No	No
14	2	102	1	18	No	No	No	No	No	No	No	No	No	No
15	2	102	1	18	No	No	No	No	No	No	No	No	No	No
16	2	99	1	18	No	No	No	No	No	No	No	No	No	No
17	2	57	1	10	No	No	No	No	No	No	No	No	No	No
18	2	31	1	6	No	No	No	No	No	No	No	No	No	No
19	2	29	1	5	No	No	No	No	No	No	No	No	No	No
20	2	11	1	2	No	No	No	No	No	No	No	No	No	No
21	2	9	1	2	No	No	No	No	No	No	No	No	No	No
22	2	9	1	2	No	No	No	No	No	No	No	No	No	No
23	2	6	1	1	No	No	No	No	No	No	No	No	No	No
24	2	6	1	1	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E
Total Stopped Delay Per Vehicle on Minor Approach (s)	9.7
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:08
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	50
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	333
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 20: McLaughlin Rd @ Trumble Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E, W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	S	N	E	W
1	37	7	0	34
2	36	7	0	33
3	35	7	0	32
4	30	6	0	27
5	28	5	0	26
6	25	5	0	23
7	23	4	0	21
8	22	4	0	20
9	18	3	0	16
10	17	3	0	15
11	17	3	0	15
12	16	3	0	15
13	14	3	0	13
14	13	3	0	12
15	13	3	0	12
16	13	2	0	12
17	7	1	0	7
18	4	1	0	4
19	4	1	0	3
20	1	0	0	1
21	1	0	0	1
22	1	0	0	1
23	1	0	0	1
24	1	0	0	1

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	44	2	34	No	No	No	No	No	No	No	No	No	No
2	2	43	2	33	No	No	No	No	No	No	No	No	No	No
3	2	42	2	32	No	No	No	No	No	No	No	No	No	No
4	2	36	2	27	No	No	No	No	No	No	No	No	No	No
5	2	33	2	26	No	No	No	No	No	No	No	No	No	No
6	2	30	2	23	No	No	No	No	No	No	No	No	No	No
7	2	27	2	21	No	No	No	No	No	No	No	No	No	No
8	2	26	2	20	No	No	No	No	No	No	No	No	No	No
9	2	21	2	16	No	No	No	No	No	No	No	No	No	No
10	2	20	2	15	No	No	No	No	No	No	No	No	No	No
11	2	20	2	15	No	No	No	No	No	No	No	No	No	No
12	2	19	2	15	No	No	No	No	No	No	No	No	No	No
13	2	17	2	13	No	No	No	No	No	No	No	No	No	No
14	2	16	2	12	No	No	No	No	No	No	No	No	No	No
15	2	16	2	12	No	No	No	No	No	No	No	No	No	No
16	2	15	2	12	No	No	No	No	No	No	No	No	No	No
17	2	8	2	7	No	No	No	No	No	No	No	No	No	No
18	2	5	2	4	No	No	No	No	No	No	No	No	No	No
19	2	5	2	3	No	No	No	No	No	No	No	No	No	No
20	2	1	2	1	No	No	No	No	No	No	No	No	No	No
21	2	1	2	1	No	No	No	No	No	No	No	No	No	No
22	2	1	2	1	No	No	No	No	No	No	No	No	No	No
23	2	1	2	1	No	No	No	No	No	No	No	No	No	No
24	2	1	2	1	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E	W
Total Stopped Delay Per Vehicle on Minor Approach (s)		6.8
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:00	0:03
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	0	34
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	78	78
Number of Approaches on Intersection	4	4
Total Volume Condition Met	No	No
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	

Signal Warrants Report For Intersection 21: McLaughlin Rd @ Sherman Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E, W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	S	N	E	W
1	5	2	0	1
2	5	2	0	1
3	5	2	0	1
4	4	2	0	1
5	4	2	0	1
6	3	1	0	1
7	3	1	0	1
8	3	1	0	1
9	2	1	0	0
10	2	1	0	0
11	2	1	0	0
12	2	1	0	0
13	2	1	0	0
14	2	1	0	0
15	2	1	0	0
16	2	1	0	0
17	1	0	0	0
18	1	0	0	0
19	1	0	0	0
20	0	0	0	0
21	0	0	0	0
22	0	0	0	0
23	0	0	0	0
24	0	0	0	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	7	2	1	No	No	No	No	No	No	No	No	No	No
2	2	7	2	1	No	No	No	No	No	No	No	No	No	No
3	2	7	2	1	No	No	No	No	No	No	No	No	No	No
4	2	6	2	1	No	No	No	No	No	No	No	No	No	No
5	2	6	2	1	No	No	No	No	No	No	No	No	No	No
6	2	4	2	1	No	No	No	No	No	No	No	No	No	No
7	2	4	2	1	No	No	No	No	No	No	No	No	No	No
8	2	4	2	1	No	No	No	No	No	No	No	No	No	No
9	2	3	2	0	No	No	No	No	No	No	No	No	No	No
10	2	3	2	0	No	No	No	No	No	No	No	No	No	No
11	2	3	2	0	No	No	No	No	No	No	No	No	No	No
12	2	3	2	0	No	No	No	No	No	No	No	No	No	No
13	2	3	2	0	No	No	No	No	No	No	No	No	No	No
14	2	3	2	0	No	No	No	No	No	No	No	No	No	No
15	2	3	2	0	No	No	No	No	No	No	No	No	No	No
16	2	3	2	0	No	No	No	No	No	No	No	No	No	No
17	2	1	2	0	No	No	No	No	No	No	No	No	No	No
18	2	1	2	0	No	No	No	No	No	No	No	No	No	No
19	2	1	2	0	No	No	No	No	No	No	No	No	No	No
20	2	0	2	0	No	No	No	No	No	No	No	No	No	No
21	2	0	2	0	No	No	No	No	No	No	No	No	No	No
22	2	0	2	0	No	No	No	No	No	No	No	No	No	No
23	2	0	2	0	No	No	No	No	No	No	No	No	No	No
24	2	0	2	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	8.7	9.1
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:00	0:00
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	0	1
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	8	8
Number of Approaches on Intersection	4	4
Total Volume Condition Met	No	No
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	

Signal Warrants Report For Intersection 22: Rouse Rd @ Murrieta Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E, W
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	S	N	E	W
1	367	442	93	34
2	352	424	89	33
3	345	415	87	32
4	294	354	74	27
5	279	336	71	26
6	250	301	63	23
7	231	278	59	21
8	220	265	56	20
9	176	212	45	16
10	165	199	42	15
11	165	199	42	15
12	158	190	40	15
13	143	172	36	13
14	132	159	33	12
15	132	159	33	12
16	128	155	33	12
17	73	88	19	7
18	40	49	10	4
19	37	44	9	3
20	15	18	4	1
21	11	13	3	1
22	11	13	3	1
23	7	9	2	1
24	7	9	2	1

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	6	809	6	127	No	No	No	No	No	Yes	Yes	Yes	No	No
2	6	776	6	122	No	No	No	No	No	Yes	Yes	Yes	No	No
3	6	760	6	119	No	No	No	No	No	Yes	Yes	Yes	No	No
4	6	648	6	101	No	No	No	No	No	No	Yes	Yes	No	No
5	6	615	6	97	No	No	No	No	No	No	No	Yes	No	No
6	6	551	6	86	No	No	No	No	No	No	No	Yes	No	No
7	6	509	6	80	No	No	No	No	No	No	No	Yes	No	No
8	6	485	6	76	No	No	No	No	No	No	No	No	No	No
9	6	388	6	61	No	No	No	No	No	No	No	No	No	No
10	6	364	6	57	No	No	No	No	No	No	No	No	No	No
11	6	364	6	57	No	No	No	No	No	No	No	No	No	No
12	6	348	6	55	No	No	No	No	No	No	No	No	No	No
13	6	315	6	49	No	No	No	No	No	No	No	No	No	No
14	6	291	6	45	No	No	No	No	No	No	No	No	No	No
15	6	291	6	45	No	No	No	No	No	No	No	No	No	No
16	6	283	6	45	No	No	No	No	No	No	No	No	No	No
17	6	161	6	26	No	No	No	No	No	No	No	No	No	No
18	6	89	6	14	No	No	No	No	No	No	No	No	No	No
19	6	81	6	12	No	No	No	No	No	No	No	No	No	No
20	6	33	6	5	No	No	No	No	No	No	No	No	No	No
21	6	24	6	4	No	No	No	No	No	No	No	No	No	No
22	6	24	6	4	No	No	No	No	No	No	No	No	No	No
23	6	16	6	3	No	No	No	No	No	No	No	No	No	No
24	6	16	6	3	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	3	4	7	0	0

Warrant 3 Condition A

Orientation	E	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	13.8	20.3
Number of Lanes on Minor Street Approach	3	3
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:21	0:11
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	93	34
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	936	936
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Yes	Yes
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	

Signal Warrants Report For Intersection 23: Rouse Rd @ Encanto Dr

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	E
1	166	143	49
2	159	137	47
3	156	134	46
4	133	114	39
5	126	109	37
6	113	97	33
7	105	90	31
8	100	86	29
9	80	69	24
10	75	64	22
11	75	64	22
12	71	61	21
13	65	56	19
14	60	51	18
15	60	51	18
16	58	50	17
17	33	29	10
18	18	16	5
19	17	14	5
20	7	6	2
21	5	4	1
22	5	4	1
23	3	3	1
24	3	3	1

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	309	1	49	No	No	No	No	No	No	No	No	No	No
2	2	296	1	47	No	No	No	No	No	No	No	No	No	No
3	2	290	1	46	No	No	No	No	No	No	No	No	No	No
4	2	247	1	39	No	No	No	No	No	No	No	No	No	No
5	2	235	1	37	No	No	No	No	No	No	No	No	No	No
6	2	210	1	33	No	No	No	No	No	No	No	No	No	No
7	2	195	1	31	No	No	No	No	No	No	No	No	No	No
8	2	186	1	29	No	No	No	No	No	No	No	No	No	No
9	2	149	1	24	No	No	No	No	No	No	No	No	No	No
10	2	139	1	22	No	No	No	No	No	No	No	No	No	No
11	2	139	1	22	No	No	No	No	No	No	No	No	No	No
12	2	132	1	21	No	No	No	No	No	No	No	No	No	No
13	2	121	1	19	No	No	No	No	No	No	No	No	No	No
14	2	111	1	18	No	No	No	No	No	No	No	No	No	No
15	2	111	1	18	No	No	No	No	No	No	No	No	No	No
16	2	108	1	17	No	No	No	No	No	No	No	No	No	No
17	2	62	1	10	No	No	No	No	No	No	No	No	No	No
18	2	34	1	5	No	No	No	No	No	No	No	No	No	No
19	2	31	1	5	No	No	No	No	No	No	No	No	No	No
20	2	13	1	2	No	No	No	No	No	No	No	No	No	No
21	2	9	1	1	No	No	No	No	No	No	No	No	No	No
22	2	9	1	1	No	No	No	No	No	No	No	No	No	No
23	2	6	1	1	No	No	No	No	No	No	No	No	No	No
24	2	6	1	1	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E
Total Stopped Delay Per Vehicle on Minor Approach (s)	10.5
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:08
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	49
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	358
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 9: Ethanac Rd @ Encanto Dr

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	Yes
#2	Four Hour Vehicular Volume	Yes
#3	Peak Hour	Yes

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	E	W	S
1	774	1322	189
2	743	1269	181
3	728	1243	178
4	619	1058	151
5	588	1005	144
6	526	899	129
7	488	833	119
8	464	793	113
9	372	635	91
10	348	595	85
11	348	595	85
12	333	568	81
13	302	516	74
14	279	476	68
15	279	476	68
16	271	463	66
17	155	264	38
18	85	145	21
19	77	132	19
20	31	53	8
21	23	40	6
22	23	40	6
23	15	26	4
24	15	26	4

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	3	2096	1	189	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	3	2012	1	181	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	3	1971	1	178	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	3	1677	1	151	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5	3	1593	1	144	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6	3	1425	1	129	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7	3	1321	1	119	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8	3	1257	1	113	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
9	3	1007	1	91	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No
10	3	943	1	85	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No
11	3	943	1	85	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No
12	3	901	1	81	No	No	No	No	Yes	Yes	Yes	Yes	Yes	No
13	3	818	1	74	No	No	No	No	No	Yes	Yes	Yes	No	No
14	3	755	1	68	No	No	No	No	No	Yes	Yes	Yes	No	No
15	3	755	1	68	No	No	No	No	No	Yes	Yes	Yes	No	No
16	3	734	1	66	No	No	No	No	No	Yes	Yes	Yes	No	No
17	3	419	1	38	No	No	No	No	No	No	No	No	No	No
18	3	230	1	21	No	No	No	No	No	No	No	No	No	No
19	3	209	1	19	No	No	No	No	No	No	No	No	No	No
20	3	84	1	8	No	No	No	No	No	No	No	No	No	No
21	3	63	1	6	No	No	No	No	No	No	No	No	No	No
22	3	63	1	6	No	No	No	No	No	No	No	No	No	No
23	3	41	1	4	No	No	No	No	No	No	No	No	No	No
24	3	41	1	4	No	No	No	No	No	No	No	No	No	No
Hours Met					4	6	8	11	12	16	16	16	12	8

Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	972.7
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	51:04
Delay Condition Met	Yes
Volume on Minor Street Approach During Same Hour	189
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	2285
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	Yes
Warrant Met for Intersection	Yes

Signal Warrants Report For Intersection 11: Ethanac Rd @ Sherman Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	Yes
#2	Four Hour Vehicular Volume	Yes
#3	Peak Hour	Yes

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S, N
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	E	W	S	N
1	534	1154	146	195
2	513	1108	140	187
3	502	1085	137	183
4	427	923	117	156
5	406	877	111	148
6	363	785	99	133
7	336	727	92	123
8	320	692	88	117
9	256	554	70	94
10	240	519	66	88
11	240	519	66	88
12	230	496	63	84
13	208	450	57	76
14	192	415	53	70
15	192	415	53	70
16	187	404	51	68
17	107	231	29	39
18	59	127	16	21
19	53	115	15	20
20	21	46	6	8
21	16	35	4	6
22	16	35	4	6
23	11	23	3	4
24	11	23	3	4

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	1688	2	341	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	2	1621	2	327	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	2	1587	2	320	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	2	1350	2	273	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5	2	1283	2	259	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6	2	1148	2	232	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7	2	1063	2	215	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8	2	1012	2	205	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
9	2	810	2	164	No	No	No	Yes	No	Yes	Yes	Yes	Yes	No
10	2	759	2	154	No	No	No	Yes	No	Yes	Yes	Yes	Yes	No
11	2	759	2	154	No	No	No	Yes	No	Yes	Yes	Yes	Yes	No
12	2	726	2	147	No	No	No	Yes	No	Yes	Yes	Yes	No	No
13	2	658	2	133	No	No	No	No	No	No	Yes	Yes	No	No
14	2	607	2	123	No	No	No	No	No	No	No	Yes	No	No
15	2	607	2	123	No	No	No	No	No	No	No	Yes	No	No
16	2	591	2	119	No	No	No	No	No	No	No	Yes	No	No
17	2	338	2	68	No	No	No	No	No	No	No	No	No	No
18	2	186	2	37	No	No	No	No	No	No	No	No	No	No
19	2	168	2	35	No	No	No	No	No	No	No	No	No	No
20	2	67	2	14	No	No	No	No	No	No	No	No	No	No
21	2	51	2	10	No	No	No	No	No	No	No	No	No	No
22	2	51	2	10	No	No	No	No	No	No	No	No	No	No
23	2	34	2	7	No	No	No	No	No	No	No	No	No	No
24	2	34	2	7	No	No	No	No	No	No	No	No	No	No
Hours Met					4	7	8	12	8	12	13	16	11	8

Warrant 3 Condition A

Orientation	S	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	10000	924.1
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	405:33	50:03
Delay Condition Met	Yes	Yes
Volume on Minor Street Approach During Same Hour	146	195
High Minor Volume Condition Met	Yes	Yes
Total Entering Volume on All Approaches During Same Hour	2029	2029
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Yes	Yes
Warrant Met for Approach	Yes	Yes
Warrant Met for Intersection	Yes	

Signal Warrants Report For Intersection 12: Ethanac Rd @ Dawson Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	E	W	S
1	487	642	54
2	468	616	52
3	458	603	51
4	390	514	43
5	370	488	41
6	331	437	37
7	307	404	34
8	292	385	32
9	234	308	26
10	219	289	24
11	219	289	24
12	209	276	23
13	190	250	21
14	175	231	19
15	175	231	19
16	170	225	19
17	97	128	11
18	54	71	6
19	49	64	5
20	19	26	2
21	15	19	2
22	15	19	2
23	10	13	1
24	10	13	1

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	1129	1	54	No	No	No	No	No	No	Yes	Yes	No	No
2	2	1084	1	52	No	No	No	No	No	No	Yes	Yes	No	No
3	2	1061	1	51	No	No	No	No	No	No	No	Yes	No	No
4	2	904	1	43	No	No	No	No	No	No	No	Yes	No	No
5	2	858	1	41	No	No	No	No	No	No	No	No	No	No
6	2	768	1	37	No	No	No	No	No	No	No	No	No	No
7	2	711	1	34	No	No	No	No	No	No	No	No	No	No
8	2	677	1	32	No	No	No	No	No	No	No	No	No	No
9	2	542	1	26	No	No	No	No	No	No	No	No	No	No
10	2	508	1	24	No	No	No	No	No	No	No	No	No	No
11	2	508	1	24	No	No	No	No	No	No	No	No	No	No
12	2	485	1	23	No	No	No	No	No	No	No	No	No	No
13	2	440	1	21	No	No	No	No	No	No	No	No	No	No
14	2	406	1	19	No	No	No	No	No	No	No	No	No	No
15	2	406	1	19	No	No	No	No	No	No	No	No	No	No
16	2	395	1	19	No	No	No	No	No	No	No	No	No	No
17	2	225	1	11	No	No	No	No	No	No	No	No	No	No
18	2	125	1	6	No	No	No	No	No	No	No	No	No	No
19	2	113	1	5	No	No	No	No	No	No	No	No	No	No
20	2	45	1	2	No	No	No	No	No	No	No	No	No	No
21	2	34	1	2	No	No	No	No	No	No	No	No	No	No
22	2	34	1	2	No	No	No	No	No	No	No	No	No	No
23	2	23	1	1	No	No	No	No	No	No	No	No	No	No
24	2	23	1	1	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	2	4	0	0

Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	24.6
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:22
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	54
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	1183
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 13: Ethanac Rd @ Antelope Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S, NW
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	E	W	S	NW
1	526	474	12	18
2	505	455	12	17
3	494	446	11	17
4	421	379	10	14
5	400	360	9	14
6	358	322	8	12
7	331	299	8	11
8	316	284	7	11
9	252	228	6	9
10	237	213	5	8
11	237	213	5	8
12	226	204	5	8
13	205	185	5	7
14	189	171	4	6
15	189	171	4	6
16	184	166	4	6
17	105	95	2	4
18	58	52	1	2
19	53	47	1	2
20	21	19	0	1
21	16	14	0	1
22	16	14	0	1
23	11	9	0	0
24	11	9	0	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	3	1000	2	30	No	No	No	No	No	No	No	No	No	No
2	3	960	2	29	No	No	No	No	No	No	No	No	No	No
3	3	940	2	28	No	No	No	No	No	No	No	No	No	No
4	3	800	2	24	No	No	No	No	No	No	No	No	No	No
5	3	760	2	23	No	No	No	No	No	No	No	No	No	No
6	3	680	2	20	No	No	No	No	No	No	No	No	No	No
7	3	630	2	19	No	No	No	No	No	No	No	No	No	No
8	3	600	2	18	No	No	No	No	No	No	No	No	No	No
9	3	480	2	15	No	No	No	No	No	No	No	No	No	No
10	3	450	2	13	No	No	No	No	No	No	No	No	No	No
11	3	450	2	13	No	No	No	No	No	No	No	No	No	No
12	3	430	2	13	No	No	No	No	No	No	No	No	No	No
13	3	390	2	12	No	No	No	No	No	No	No	No	No	No
14	3	360	2	10	No	No	No	No	No	No	No	No	No	No
15	3	360	2	10	No	No	No	No	No	No	No	No	No	No
16	3	350	2	10	No	No	No	No	No	No	No	No	No	No
17	3	200	2	6	No	No	No	No	No	No	No	No	No	No
18	3	110	2	3	No	No	No	No	No	No	No	No	No	No
19	3	100	2	3	No	No	No	No	No	No	No	No	No	No
20	3	40	2	1	No	No	No	No	No	No	No	No	No	No
21	3	30	2	1	No	No	No	No	No	No	No	No	No	No
22	3	30	2	1	No	No	No	No	No	No	No	No	No	No
23	3	20	2	0	No	No	No	No	No	No	No	No	No	No
24	3	20	2	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	S	NW
Total Stopped Delay Per Vehicle on Minor Approach (s)	21.4	23.9
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:04	0:07
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	12	18
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	1030	1030
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Yes	Yes
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	

Signal Warrants Report For Intersection 17: Matthews Rd @ Palomar Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	Yes
#2	Four Hour Vehicular Volume	Yes
#3	Peak Hour	Yes

Intersection Warrants Parameters

Major Approaches	SE, NW
Minor Approaches	N
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	SE	NW	N
1	392	492	330
2	376	472	317
3	368	462	310
4	314	394	264
5	298	374	251
6	267	335	224
7	247	310	208
8	235	295	198
9	188	236	158
10	176	221	149
11	176	221	149
12	169	212	142
13	153	192	129
14	141	177	119
15	141	177	119
16	137	172	115
17	78	98	66
18	43	54	36
19	39	49	33
20	16	20	13
21	12	15	10
22	12	15	10
23	8	10	7
24	8	10	7

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	884	2	330	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
2	2	848	2	317	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
3	2	830	2	310	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
4	2	708	2	264	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes
5	2	672	2	251	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No
6	2	602	2	224	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes	No
7	2	557	2	208	No	Yes	Yes	Yes	No	No	No	Yes	Yes	No
8	2	530	2	198	No	Yes	Yes	Yes	No	No	No	Yes	No	No
9	2	424	2	158	No	No	Yes	Yes	No	No	No	No	No	No
10	2	397	2	149	No	No	No	Yes	No	No	No	No	No	No
11	2	397	2	149	No	No	No	Yes	No	No	No	No	No	No
12	2	381	2	142	No	No	No	Yes	No	No	No	No	No	No
13	2	345	2	129	No	No	No	Yes	No	No	No	No	No	No
14	2	318	2	119	No	No	No	No	No	No	No	No	No	No
15	2	318	2	119	No	No	No	No	No	No	No	No	No	No
16	2	309	2	115	No	No	No	No	No	No	No	No	No	No
17	2	176	2	66	No	No	No	No	No	No	No	No	No	No
18	2	97	2	36	No	No	No	No	No	No	No	No	No	No
19	2	88	2	33	No	No	No	No	No	No	No	No	No	No
20	2	36	2	13	No	No	No	No	No	No	No	No	No	No
21	2	27	2	10	No	No	No	No	No	No	No	No	No	No
22	2	27	2	10	No	No	No	No	No	No	No	No	No	No
23	2	18	2	7	No	No	No	No	No	No	No	No	No	No
24	2	18	2	7	No	No	No	No	No	No	No	No	No	No
Hours Met					6	8	9	13	0	3	5	8	7	4

Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	19.6
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	1:47
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	330
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	1214
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 18: McLaughlin Rd @ Murrieta Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E, W
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	S	N	E	W
1	367	265	18	15
2	352	254	17	14
3	345	249	17	14
4	294	212	14	12
5	279	201	14	11
6	250	180	12	10
7	231	167	11	9
8	220	159	11	9
9	176	127	9	7
10	165	119	8	7
11	165	119	8	7
12	158	114	8	6
13	143	103	7	6
14	132	95	6	5
15	132	95	6	5
16	128	93	6	5
17	73	53	4	3
18	40	29	2	2
19	37	27	2	2
20	15	11	1	1
21	11	8	1	0
22	11	8	1	0
23	7	5	0	0
24	7	5	0	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	4	632	2	33	No	No	No	No	No	No	No	No	No	No
2	4	606	2	31	No	No	No	No	No	No	No	No	No	No
3	4	594	2	31	No	No	No	No	No	No	No	No	No	No
4	4	506	2	26	No	No	No	No	No	No	No	No	No	No
5	4	480	2	25	No	No	No	No	No	No	No	No	No	No
6	4	430	2	22	No	No	No	No	No	No	No	No	No	No
7	4	398	2	20	No	No	No	No	No	No	No	No	No	No
8	4	379	2	20	No	No	No	No	No	No	No	No	No	No
9	4	303	2	16	No	No	No	No	No	No	No	No	No	No
10	4	284	2	15	No	No	No	No	No	No	No	No	No	No
11	4	284	2	15	No	No	No	No	No	No	No	No	No	No
12	4	272	2	14	No	No	No	No	No	No	No	No	No	No
13	4	246	2	13	No	No	No	No	No	No	No	No	No	No
14	4	227	2	11	No	No	No	No	No	No	No	No	No	No
15	4	227	2	11	No	No	No	No	No	No	No	No	No	No
16	4	221	2	11	No	No	No	No	No	No	No	No	No	No
17	4	126	2	7	No	No	No	No	No	No	No	No	No	No
18	4	69	2	4	No	No	No	No	No	No	No	No	No	No
19	4	64	2	4	No	No	No	No	No	No	No	No	No	No
20	4	26	2	2	No	No	No	No	No	No	No	No	No	No
21	4	19	2	1	No	No	No	No	No	No	No	No	No	No
22	4	19	2	1	No	No	No	No	No	No	No	No	No	No
23	4	12	2	0	No	No	No	No	No	No	No	No	No	No
24	4	12	2	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	11.6	15.4
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:03	0:03
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	18	15
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	665	665
Number of Approaches on Intersection	4	4
Total Volume Condition Met	No	No
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	

Signal Warrants Report For Intersection 19: McLaughlin Rd @ Encanto Dr

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	E
1	288	238	67
2	276	228	64
3	271	224	63
4	230	190	54
5	219	181	51
6	196	162	46
7	181	150	42
8	173	143	40
9	138	114	32
10	130	107	30
11	130	107	30
12	124	102	29
13	112	93	26
14	104	86	24
15	104	86	24
16	101	83	23
17	58	48	13
18	32	26	7
19	29	24	7
20	12	10	3
21	9	7	2
22	9	7	2
23	6	5	1
24	6	5	1

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	526	1	67	No	No	No	No	No	No	No	Yes	No	No
2	2	504	1	64	No	No	No	No	No	No	No	Yes	No	No
3	2	495	1	63	No	No	No	No	No	No	No	No	No	No
4	2	420	1	54	No	No	No	No	No	No	No	No	No	No
5	2	400	1	51	No	No	No	No	No	No	No	No	No	No
6	2	358	1	46	No	No	No	No	No	No	No	No	No	No
7	2	331	1	42	No	No	No	No	No	No	No	No	No	No
8	2	316	1	40	No	No	No	No	No	No	No	No	No	No
9	2	252	1	32	No	No	No	No	No	No	No	No	No	No
10	2	237	1	30	No	No	No	No	No	No	No	No	No	No
11	2	237	1	30	No	No	No	No	No	No	No	No	No	No
12	2	226	1	29	No	No	No	No	No	No	No	No	No	No
13	2	205	1	26	No	No	No	No	No	No	No	No	No	No
14	2	190	1	24	No	No	No	No	No	No	No	No	No	No
15	2	190	1	24	No	No	No	No	No	No	No	No	No	No
16	2	184	1	23	No	No	No	No	No	No	No	No	No	No
17	2	106	1	13	No	No	No	No	No	No	No	No	No	No
18	2	58	1	7	No	No	No	No	No	No	No	No	No	No
19	2	53	1	7	No	No	No	No	No	No	No	No	No	No
20	2	22	1	3	No	No	No	No	No	No	No	No	No	No
21	2	16	1	2	No	No	No	No	No	No	No	No	No	No
22	2	16	1	2	No	No	No	No	No	No	No	No	No	No
23	2	11	1	1	No	No	No	No	No	No	No	No	No	No
24	2	11	1	1	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	2	0	0

Warrant 3 Condition A

Orientation	E
Total Stopped Delay Per Vehicle on Minor Approach (s)	12
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:13
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	67
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	593
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 20: McLaughlin Rd @ Trumble Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E, W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	S	N	E	W
1	41	11	15	107
2	39	11	14	103
3	39	10	14	101
4	33	9	12	86
5	31	8	11	81
6	28	7	10	73
7	26	7	9	67
8	25	7	9	64
9	20	5	7	51
10	18	5	7	48
11	18	5	7	48
12	18	5	6	46
13	16	4	6	42
14	15	4	5	39
15	15	4	5	39
16	14	4	5	37
17	8	2	3	21
18	5	1	2	12
19	4	1	2	11
20	2	0	1	4
21	1	0	0	3
22	1	0	0	3
23	1	0	0	2
24	1	0	0	2

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	52	2	122	No	No	No	No	No	No	No	No	No	No
2	2	50	2	117	No	No	No	No	No	No	No	No	No	No
3	2	49	2	115	No	No	No	No	No	No	No	No	No	No
4	2	42	2	98	No	No	No	No	No	No	No	No	No	No
5	2	39	2	92	No	No	No	No	No	No	No	No	No	No
6	2	35	2	83	No	No	No	No	No	No	No	No	No	No
7	2	33	2	76	No	No	No	No	No	No	No	No	No	No
8	2	32	2	73	No	No	No	No	No	No	No	No	No	No
9	2	25	2	58	No	No	No	No	No	No	No	No	No	No
10	2	23	2	55	No	No	No	No	No	No	No	No	No	No
11	2	23	2	55	No	No	No	No	No	No	No	No	No	No
12	2	23	2	52	No	No	No	No	No	No	No	No	No	No
13	2	20	2	48	No	No	No	No	No	No	No	No	No	No
14	2	19	2	44	No	No	No	No	No	No	No	No	No	No
15	2	19	2	44	No	No	No	No	No	No	No	No	No	No
16	2	18	2	42	No	No	No	No	No	No	No	No	No	No
17	2	10	2	24	No	No	No	No	No	No	No	No	No	No
18	2	6	2	14	No	No	No	No	No	No	No	No	No	No
19	2	5	2	13	No	No	No	No	No	No	No	No	No	No
20	2	2	2	5	No	No	No	No	No	No	No	No	No	No
21	2	1	2	3	No	No	No	No	No	No	No	No	No	No
22	2	1	2	3	No	No	No	No	No	No	No	No	No	No
23	2	1	2	2	No	No	No	No	No	No	No	No	No	No
24	2	1	2	2	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	7.2	7.6
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:01	0:13
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	15	107
High Minor Volume Condition Met	No	Yes
Total Entering Volume on All Approaches During Same Hour	174	174
Number of Approaches on Intersection	4	4
Total Volume Condition Met	No	No
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	

Signal Warrants Report For Intersection 21: McLaughlin Rd @ Sherman Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E, W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	S	N	E	W
1	0	15	0	68
2	0	14	0	65
3	0	14	0	64
4	0	12	0	54
5	0	11	0	52
6	0	10	0	46
7	0	9	0	43
8	0	9	0	41
9	0	7	0	33
10	0	7	0	31
11	0	7	0	31
12	0	6	0	29
13	0	6	0	27
14	0	5	0	24
15	0	5	0	24
16	0	5	0	24
17	0	3	0	14
18	0	2	0	7
19	0	2	0	7
20	0	1	0	3
21	0	0	0	2
22	0	0	0	2
23	0	0	0	1
24	0	0	0	1

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	15	2	68	No	No	No	No	No	No	No	No	No	No
2	2	14	2	65	No	No	No	No	No	No	No	No	No	No
3	2	14	2	64	No	No	No	No	No	No	No	No	No	No
4	2	12	2	54	No	No	No	No	No	No	No	No	No	No
5	2	11	2	52	No	No	No	No	No	No	No	No	No	No
6	2	10	2	46	No	No	No	No	No	No	No	No	No	No
7	2	9	2	43	No	No	No	No	No	No	No	No	No	No
8	2	9	2	41	No	No	No	No	No	No	No	No	No	No
9	2	7	2	33	No	No	No	No	No	No	No	No	No	No
10	2	7	2	31	No	No	No	No	No	No	No	No	No	No
11	2	7	2	31	No	No	No	No	No	No	No	No	No	No
12	2	6	2	29	No	No	No	No	No	No	No	No	No	No
13	2	6	2	27	No	No	No	No	No	No	No	No	No	No
14	2	5	2	24	No	No	No	No	No	No	No	No	No	No
15	2	5	2	24	No	No	No	No	No	No	No	No	No	No
16	2	5	2	24	No	No	No	No	No	No	No	No	No	No
17	2	3	2	14	No	No	No	No	No	No	No	No	No	No
18	2	2	2	7	No	No	No	No	No	No	No	No	No	No
19	2	2	2	7	No	No	No	No	No	No	No	No	No	No
20	2	1	2	3	No	No	No	No	No	No	No	No	No	No
21	2	0	2	2	No	No	No	No	No	No	No	No	No	No
22	2	0	2	2	No	No	No	No	No	No	No	No	No	No
23	2	0	2	1	No	No	No	No	No	No	No	No	No	No
24	2	0	2	1	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	8.7	8.8
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:00	0:10
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	0	68
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	83	83
Number of Approaches on Intersection	4	4
Total Volume Condition Met	No	No
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	

Signal Warrants Report For Intersection 22: Rouse Rd @ Murrieta Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E, W
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	S	N	E	W
1	298	278	87	42
2	286	267	84	40
3	280	261	82	39
4	238	222	70	34
5	226	211	66	32
6	203	189	59	29
7	188	175	55	26
8	179	167	52	25
9	143	133	42	20
10	134	125	39	19
11	134	125	39	19
12	128	120	37	18
13	116	108	34	16
14	107	100	31	15
15	107	100	31	15
16	104	97	30	15
17	60	56	17	8
18	33	31	10	5
19	30	28	9	4
20	12	11	3	2
21	9	8	3	1
22	9	8	3	1
23	6	6	2	1
24	6	6	2	1

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	6	576	6	129	No	No	No	No	No	No	No	Yes	No	No
2	6	553	6	124	No	No	No	No	No	No	No	Yes	No	No
3	6	541	6	121	No	No	No	No	No	No	No	Yes	No	No
4	6	460	6	104	No	No	No	No	No	No	No	No	No	No
5	6	437	6	98	No	No	No	No	No	No	No	No	No	No
6	6	392	6	88	No	No	No	No	No	No	No	No	No	No
7	6	363	6	81	No	No	No	No	No	No	No	No	No	No
8	6	346	6	77	No	No	No	No	No	No	No	No	No	No
9	6	276	6	62	No	No	No	No	No	No	No	No	No	No
10	6	259	6	58	No	No	No	No	No	No	No	No	No	No
11	6	259	6	58	No	No	No	No	No	No	No	No	No	No
12	6	248	6	55	No	No	No	No	No	No	No	No	No	No
13	6	224	6	50	No	No	No	No	No	No	No	No	No	No
14	6	207	6	46	No	No	No	No	No	No	No	No	No	No
15	6	207	6	46	No	No	No	No	No	No	No	No	No	No
16	6	201	6	45	No	No	No	No	No	No	No	No	No	No
17	6	116	6	25	No	No	No	No	No	No	No	No	No	No
18	6	64	6	15	No	No	No	No	No	No	No	No	No	No
19	6	58	6	13	No	No	No	No	No	No	No	No	No	No
20	6	23	6	5	No	No	No	No	No	No	No	No	No	No
21	6	17	6	4	No	No	No	No	No	No	No	No	No	No
22	6	17	6	4	No	No	No	No	No	No	No	No	No	No
23	6	12	6	3	No	No	No	No	No	No	No	No	No	No
24	6	12	6	3	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	3	0	0

Warrant 3 Condition A

Orientation	E	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	11.4	15.1
Number of Lanes on Minor Street Approach	3	3
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:16	0:10
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	87	42
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	705	705
Number of Approaches on Intersection	4	4
Total Volume Condition Met	No	No
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	

Signal Warrants Report For Intersection 23: Rouse Rd @ Encanto Dr

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	E
1	336	198	128
2	323	190	123
3	316	186	120
4	269	158	102
5	255	150	97
6	228	135	87
7	212	125	81
8	202	119	77
9	161	95	61
10	151	89	58
11	151	89	58
12	144	85	55
13	131	77	50
14	121	71	46
15	121	71	46
16	118	69	45
17	67	40	26
18	37	22	14
19	34	20	13
20	13	8	5
21	10	6	4
22	10	6	4
23	7	4	3
24	7	4	3

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	534	1	128	No	Yes	Yes	Yes	No	No	No	Yes	No	No
2	2	513	1	123	No	Yes	Yes	Yes	No	No	No	Yes	No	No
3	2	502	1	120	No	Yes	Yes	Yes	No	No	No	No	No	No
4	2	427	1	102	No	No	No	Yes	No	No	No	No	No	No
5	2	405	1	97	No	No	No	Yes	No	No	No	No	No	No
6	2	363	1	87	No	No	No	Yes	No	No	No	No	No	No
7	2	337	1	81	No	No	No	No	No	No	No	No	No	No
8	2	321	1	77	No	No	No	No	No	No	No	No	No	No
9	2	256	1	61	No	No	No	No	No	No	No	No	No	No
10	2	240	1	58	No	No	No	No	No	No	No	No	No	No
11	2	240	1	58	No	No	No	No	No	No	No	No	No	No
12	2	229	1	55	No	No	No	No	No	No	No	No	No	No
13	2	208	1	50	No	No	No	No	No	No	No	No	No	No
14	2	192	1	46	No	No	No	No	No	No	No	No	No	No
15	2	192	1	46	No	No	No	No	No	No	No	No	No	No
16	2	187	1	45	No	No	No	No	No	No	No	No	No	No
17	2	107	1	26	No	No	No	No	No	No	No	No	No	No
18	2	59	1	14	No	No	No	No	No	No	No	No	No	No
19	2	54	1	13	No	No	No	No	No	No	No	No	No	No
20	2	21	1	5	No	No	No	No	No	No	No	No	No	No
21	2	16	1	4	No	No	No	No	No	No	No	No	No	No
22	2	16	1	4	No	No	No	No	No	No	No	No	No	No
23	2	11	1	3	No	No	No	No	No	No	No	No	No	No
24	2	11	1	3	No	No	No	No	No	No	No	No	No	No
Hours Met					0	3	3	6	0	0	0	2	0	0

Warrant 3 Condition A

Orientation	E
Total Stopped Delay Per Vehicle on Minor Approach (s)	13.9
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:29
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	128
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	662
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 28: Sherman Rd @ Project dwy 1

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	E
1	115	632	72
2	110	607	69
3	108	594	68
4	92	506	58
5	87	480	55
6	78	430	49
7	72	398	45
8	69	379	43
9	55	303	35
10	52	284	32
11	52	284	32
12	49	272	31
13	45	246	28
14	41	228	26
15	41	228	26
16	40	221	25
17	23	126	14
18	13	70	8
19	12	63	7
20	5	25	3
21	3	19	2
22	3	19	2
23	2	13	1
24	2	13	1

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	3	747	1	72	No	No	No	No	No	Yes	Yes	Yes	No	No
2	3	717	1	69	No	No	No	No	No	No	Yes	Yes	No	No
3	3	702	1	68	No	No	No	No	No	No	Yes	Yes	No	No
4	3	598	1	58	No	No	No	No	No	No	No	Yes	No	No
5	3	567	1	55	No	No	No	No	No	No	No	Yes	No	No
6	3	508	1	49	No	No	No	No	No	No	No	Yes	No	No
7	3	470	1	45	No	No	No	No	No	No	No	No	No	No
8	3	448	1	43	No	No	No	No	No	No	No	No	No	No
9	3	358	1	35	No	No	No	No	No	No	No	No	No	No
10	3	336	1	32	No	No	No	No	No	No	No	No	No	No
11	3	336	1	32	No	No	No	No	No	No	No	No	No	No
12	3	321	1	31	No	No	No	No	No	No	No	No	No	No
13	3	291	1	28	No	No	No	No	No	No	No	No	No	No
14	3	269	1	26	No	No	No	No	No	No	No	No	No	No
15	3	269	1	26	No	No	No	No	No	No	No	No	No	No
16	3	261	1	25	No	No	No	No	No	No	No	No	No	No
17	3	149	1	14	No	No	No	No	No	No	No	No	No	No
18	3	83	1	8	No	No	No	No	No	No	No	No	No	No
19	3	75	1	7	No	No	No	No	No	No	No	No	No	No
20	3	30	1	3	No	No	No	No	No	No	No	No	No	No
21	3	22	1	2	No	No	No	No	No	No	No	No	No	No
22	3	22	1	2	No	No	No	No	No	No	No	No	No	No
23	3	15	1	1	No	No	No	No	No	No	No	No	No	No
24	3	15	1	1	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	1	3	6	0	0

Warrant 3 Condition A

Orientation	E
Total Stopped Delay Per Vehicle on Minor Approach (s)	10.8
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:12
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	72
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	819
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 29: Sherman Rd @ Project dwy 2

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	W
1	115	350	2
2	110	336	2
3	108	329	2
4	92	280	2
5	87	266	2
6	78	238	1
7	72	221	1
8	69	210	1
9	55	168	1
10	52	158	1
11	52	158	1
12	49	151	1
13	45	137	1
14	41	126	1
15	41	126	1
16	40	122	1
17	23	70	0
18	13	39	0
19	12	35	0
20	5	14	0
21	3	11	0
22	3	11	0
23	2	7	0
24	2	7	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	465	1	2	No	No	No	No	No	No	No	No	No	No
2	2	446	1	2	No	No	No	No	No	No	No	No	No	No
3	2	437	1	2	No	No	No	No	No	No	No	No	No	No
4	2	372	1	2	No	No	No	No	No	No	No	No	No	No
5	2	353	1	2	No	No	No	No	No	No	No	No	No	No
6	2	316	1	1	No	No	No	No	No	No	No	No	No	No
7	2	293	1	1	No	No	No	No	No	No	No	No	No	No
8	2	279	1	1	No	No	No	No	No	No	No	No	No	No
9	2	223	1	1	No	No	No	No	No	No	No	No	No	No
10	2	210	1	1	No	No	No	No	No	No	No	No	No	No
11	2	210	1	1	No	No	No	No	No	No	No	No	No	No
12	2	200	1	1	No	No	No	No	No	No	No	No	No	No
13	2	182	1	1	No	No	No	No	No	No	No	No	No	No
14	2	167	1	1	No	No	No	No	No	No	No	No	No	No
15	2	167	1	1	No	No	No	No	No	No	No	No	No	No
16	2	162	1	1	No	No	No	No	No	No	No	No	No	No
17	2	93	1	0	No	No	No	No	No	No	No	No	No	No
18	2	52	1	0	No	No	No	No	No	No	No	No	No	No
19	2	47	1	0	No	No	No	No	No	No	No	No	No	No
20	2	19	1	0	No	No	No	No	No	No	No	No	No	No
21	2	14	1	0	No	No	No	No	No	No	No	No	No	No
22	2	14	1	0	No	No	No	No	No	No	No	No	No	No
23	2	9	1	0	No	No	No	No	No	No	No	No	No	No
24	2	9	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	11.7
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:00
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	2
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	467
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 30: Sherman Rd @ Project dwy 3

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	N, S
Minor Approaches	E, W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	N	S	E	W
1	342	80	76	0
2	328	77	73	0
3	321	75	71	0
4	274	64	61	0
5	260	61	58	0
6	233	54	52	0
7	215	50	48	0
8	205	48	46	0
9	164	38	36	0
10	154	36	34	0
11	154	36	34	0
12	147	34	33	0
13	133	31	30	0
14	123	29	27	0
15	123	29	27	0
16	120	28	27	0
17	68	16	15	0
18	38	9	8	0
19	34	8	8	0
20	14	3	3	0
21	10	2	2	0
22	10	2	2	0
23	7	2	2	0
24	7	2	2	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	3	422	2	76	No	No	No	No	No	No	No	No	No	No
2	3	405	2	73	No	No	No	No	No	No	No	No	No	No
3	3	396	2	71	No	No	No	No	No	No	No	No	No	No
4	3	338	2	61	No	No	No	No	No	No	No	No	No	No
5	3	321	2	58	No	No	No	No	No	No	No	No	No	No
6	3	287	2	52	No	No	No	No	No	No	No	No	No	No
7	3	265	2	48	No	No	No	No	No	No	No	No	No	No
8	3	253	2	46	No	No	No	No	No	No	No	No	No	No
9	3	202	2	36	No	No	No	No	No	No	No	No	No	No
10	3	190	2	34	No	No	No	No	No	No	No	No	No	No
11	3	190	2	34	No	No	No	No	No	No	No	No	No	No
12	3	181	2	33	No	No	No	No	No	No	No	No	No	No
13	3	164	2	30	No	No	No	No	No	No	No	No	No	No
14	3	152	2	27	No	No	No	No	No	No	No	No	No	No
15	3	152	2	27	No	No	No	No	No	No	No	No	No	No
16	3	148	2	27	No	No	No	No	No	No	No	No	No	No
17	3	84	2	15	No	No	No	No	No	No	No	No	No	No
18	3	47	2	8	No	No	No	No	No	No	No	No	No	No
19	3	42	2	8	No	No	No	No	No	No	No	No	No	No
20	3	17	2	3	No	No	No	No	No	No	No	No	No	No
21	3	12	2	2	No	No	No	No	No	No	No	No	No	No
22	3	12	2	2	No	No	No	No	No	No	No	No	No	No
23	3	9	2	2	No	No	No	No	No	No	No	No	No	No
24	3	9	2	2	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	10.1	15.7
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:12	0:00
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	76	0
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	498	498
Number of Approaches on Intersection	4	4
Total Volume Condition Met	No	No
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	

Signal Warrants Report For Intersection 31: Trumble Rd @ Project dwy 4

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	E
1	14	7	2
2	13	7	2
3	13	7	2
4	11	6	2
5	11	5	2
6	10	5	1
7	9	4	1
8	8	4	1
9	7	3	1
10	6	3	1
11	6	3	1
12	6	3	1
13	5	3	1
14	5	3	1
15	5	3	1
16	5	2	1
17	3	1	0
18	2	1	0
19	1	1	0
20	1	0	0
21	0	0	0
22	0	0	0
23	0	0	0
24	0	0	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	21	1	2	No	No	No	No	No	No	No	No	No	No
2	2	20	1	2	No	No	No	No	No	No	No	No	No	No
3	2	20	1	2	No	No	No	No	No	No	No	No	No	No
4	2	17	1	2	No	No	No	No	No	No	No	No	No	No
5	2	16	1	2	No	No	No	No	No	No	No	No	No	No
6	2	15	1	1	No	No	No	No	No	No	No	No	No	No
7	2	13	1	1	No	No	No	No	No	No	No	No	No	No
8	2	12	1	1	No	No	No	No	No	No	No	No	No	No
9	2	10	1	1	No	No	No	No	No	No	No	No	No	No
10	2	9	1	1	No	No	No	No	No	No	No	No	No	No
11	2	9	1	1	No	No	No	No	No	No	No	No	No	No
12	2	9	1	1	No	No	No	No	No	No	No	No	No	No
13	2	8	1	1	No	No	No	No	No	No	No	No	No	No
14	2	8	1	1	No	No	No	No	No	No	No	No	No	No
15	2	8	1	1	No	No	No	No	No	No	No	No	No	No
16	2	7	1	1	No	No	No	No	No	No	No	No	No	No
17	2	4	1	0	No	No	No	No	No	No	No	No	No	No
18	2	3	1	0	No	No	No	No	No	No	No	No	No	No
19	2	2	1	0	No	No	No	No	No	No	No	No	No	No
20	2	1	1	0	No	No	No	No	No	No	No	No	No	No
21	2	0	1	0	No	No	No	No	No	No	No	No	No	No
22	2	0	1	0	No	No	No	No	No	No	No	No	No	No
23	2	0	1	0	No	No	No	No	No	No	No	No	No	No
24	2	0	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E
Total Stopped Delay Per Vehicle on Minor Approach (s)	8.6
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:00
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	2
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	23
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 32: Trumble Rd @ Project dwy 5

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	E
1	23	9	2
2	22	9	2
3	22	8	2
4	18	7	2
5	17	7	2
6	16	6	1
7	14	6	1
8	14	5	1
9	11	4	1
10	10	4	1
11	10	4	1
12	10	4	1
13	9	4	1
14	8	3	1
15	8	3	1
16	8	3	1
17	5	2	0
18	3	1	0
19	2	1	0
20	1	0	0
21	1	0	0
22	1	0	0
23	0	0	0
24	0	0	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	32	1	2	No	No	No	No	No	No	No	No	No	No
2	2	31	1	2	No	No	No	No	No	No	No	No	No	No
3	2	30	1	2	No	No	No	No	No	No	No	No	No	No
4	2	25	1	2	No	No	No	No	No	No	No	No	No	No
5	2	24	1	2	No	No	No	No	No	No	No	No	No	No
6	2	22	1	1	No	No	No	No	No	No	No	No	No	No
7	2	20	1	1	No	No	No	No	No	No	No	No	No	No
8	2	19	1	1	No	No	No	No	No	No	No	No	No	No
9	2	15	1	1	No	No	No	No	No	No	No	No	No	No
10	2	14	1	1	No	No	No	No	No	No	No	No	No	No
11	2	14	1	1	No	No	No	No	No	No	No	No	No	No
12	2	14	1	1	No	No	No	No	No	No	No	No	No	No
13	2	13	1	1	No	No	No	No	No	No	No	No	No	No
14	2	11	1	1	No	No	No	No	No	No	No	No	No	No
15	2	11	1	1	No	No	No	No	No	No	No	No	No	No
16	2	11	1	1	No	No	No	No	No	No	No	No	No	No
17	2	7	1	0	No	No	No	No	No	No	No	No	No	No
18	2	4	1	0	No	No	No	No	No	No	No	No	No	No
19	2	3	1	0	No	No	No	No	No	No	No	No	No	No
20	2	1	1	0	No	No	No	No	No	No	No	No	No	No
21	2	1	1	0	No	No	No	No	No	No	No	No	No	No
22	2	1	1	0	No	No	No	No	No	No	No	No	No	No
23	2	0	1	0	No	No	No	No	No	No	No	No	No	No
24	2	0	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E
Total Stopped Delay Per Vehicle on Minor Approach (s)	8.7
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:00
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	2
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	34
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 33: Dawson Rd @ Project dwy 6

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	W
1	23	234	31
2	22	225	30
3	22	220	29
4	18	187	25
5	17	178	24
6	16	159	21
7	14	147	20
8	14	140	19
9	11	112	15
10	10	105	14
11	10	105	14
12	10	101	13
13	9	91	12
14	8	84	11
15	8	84	11
16	8	82	11
17	5	47	6
18	3	26	3
19	2	23	3
20	1	9	1
21	1	7	1
22	1	7	1
23	0	5	1
24	0	5	1

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	257	1	31	No	No	No	No	No	No	No	No	No	No
2	2	247	1	30	No	No	No	No	No	No	No	No	No	No
3	2	242	1	29	No	No	No	No	No	No	No	No	No	No
4	2	205	1	25	No	No	No	No	No	No	No	No	No	No
5	2	195	1	24	No	No	No	No	No	No	No	No	No	No
6	2	175	1	21	No	No	No	No	No	No	No	No	No	No
7	2	161	1	20	No	No	No	No	No	No	No	No	No	No
8	2	154	1	19	No	No	No	No	No	No	No	No	No	No
9	2	123	1	15	No	No	No	No	No	No	No	No	No	No
10	2	115	1	14	No	No	No	No	No	No	No	No	No	No
11	2	115	1	14	No	No	No	No	No	No	No	No	No	No
12	2	111	1	13	No	No	No	No	No	No	No	No	No	No
13	2	100	1	12	No	No	No	No	No	No	No	No	No	No
14	2	92	1	11	No	No	No	No	No	No	No	No	No	No
15	2	92	1	11	No	No	No	No	No	No	No	No	No	No
16	2	90	1	11	No	No	No	No	No	No	No	No	No	No
17	2	52	1	6	No	No	No	No	No	No	No	No	No	No
18	2	29	1	3	No	No	No	No	No	No	No	No	No	No
19	2	25	1	3	No	No	No	No	No	No	No	No	No	No
20	2	10	1	1	No	No	No	No	No	No	No	No	No	No
21	2	8	1	1	No	No	No	No	No	No	No	No	No	No
22	2	8	1	1	No	No	No	No	No	No	No	No	No	No
23	2	5	1	1	No	No	No	No	No	No	No	No	No	No
24	2	5	1	1	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	9.7
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:05
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	31
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	288
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 34: Dawson Rd @ Project dwy 7

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	N, S
Minor Approaches	W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	N	S	W
1	96	2	21
2	92	2	20
3	90	2	20
4	77	2	17
5	73	2	16
6	65	1	14
7	60	1	13
8	58	1	13
9	46	1	10
10	43	1	9
11	43	1	9
12	41	1	9
13	37	1	8
14	35	1	8
15	35	1	8
16	34	1	7
17	19	0	4
18	11	0	2
19	10	0	2
20	4	0	1
21	3	0	1
22	3	0	1
23	2	0	0
24	2	0	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	98	1	21	No	No	No	No	No	No	No	No	No	No
2	2	94	1	20	No	No	No	No	No	No	No	No	No	No
3	2	92	1	20	No	No	No	No	No	No	No	No	No	No
4	2	79	1	17	No	No	No	No	No	No	No	No	No	No
5	2	75	1	16	No	No	No	No	No	No	No	No	No	No
6	2	66	1	14	No	No	No	No	No	No	No	No	No	No
7	2	61	1	13	No	No	No	No	No	No	No	No	No	No
8	2	59	1	13	No	No	No	No	No	No	No	No	No	No
9	2	47	1	10	No	No	No	No	No	No	No	No	No	No
10	2	44	1	9	No	No	No	No	No	No	No	No	No	No
11	2	44	1	9	No	No	No	No	No	No	No	No	No	No
12	2	42	1	9	No	No	No	No	No	No	No	No	No	No
13	2	38	1	8	No	No	No	No	No	No	No	No	No	No
14	2	36	1	8	No	No	No	No	No	No	No	No	No	No
15	2	36	1	8	No	No	No	No	No	No	No	No	No	No
16	2	35	1	7	No	No	No	No	No	No	No	No	No	No
17	2	19	1	4	No	No	No	No	No	No	No	No	No	No
18	2	11	1	2	No	No	No	No	No	No	No	No	No	No
19	2	10	1	2	No	No	No	No	No	No	No	No	No	No
20	2	4	1	1	No	No	No	No	No	No	No	No	No	No
21	2	3	1	1	No	No	No	No	No	No	No	No	No	No
22	2	3	1	1	No	No	No	No	No	No	No	No	No	No
23	2	2	1	0	No	No	No	No	No	No	No	No	No	No
24	2	2	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	8.9
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:03
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	21
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	119
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 9: Ethanac Rd @ Encanto Dr

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	Yes
#2	Four Hour Vehicular Volume	Yes
#3	Peak Hour	Yes

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	E	W	S
1	1155	1083	217
2	1109	1040	208
3	1086	1018	204
4	924	866	174
5	878	823	165
6	785	736	148
7	728	682	137
8	693	650	130
9	554	520	104
10	520	487	98
11	520	487	98
12	497	466	93
13	450	422	85
14	416	390	78
15	416	390	78
16	404	379	76
17	231	217	43
18	127	119	24
19	116	108	22
20	46	43	9
21	35	32	7
22	35	32	7
23	23	22	4
24	23	22	4

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	3	2238	1	217	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	3	2149	1	208	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	3	2104	1	204	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	3	1790	1	174	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5	3	1701	1	165	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6	3	1521	1	148	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7	3	1410	1	137	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8	3	1343	1	130	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
9	3	1074	1	104	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
10	3	1007	1	98	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No
11	3	1007	1	98	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No
12	3	963	1	93	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No
13	3	872	1	85	No	No	No	Yes	No	Yes	Yes	Yes	Yes	No
14	3	806	1	78	No	No	No	No	No	Yes	Yes	Yes	Yes	No
15	3	806	1	78	No	No	No	No	No	Yes	Yes	Yes	Yes	No
16	3	783	1	76	No	No	No	No	No	Yes	Yes	Yes	No	No
17	3	448	1	43	No	No	No	No	No	No	No	No	No	No
18	3	246	1	24	No	No	No	No	No	No	No	No	No	No
19	3	224	1	22	No	No	No	No	No	No	No	No	No	No
20	3	89	1	9	No	No	No	No	No	No	No	No	No	No
21	3	67	1	7	No	No	No	No	No	No	No	No	No	No
22	3	67	1	7	No	No	No	No	No	No	No	No	No	No
23	3	45	1	4	No	No	No	No	No	No	No	No	No	No
24	3	45	1	4	No	No	No	No	No	No	No	No	No	No
Hours Met					5	8	8	13	12	16	16	16	15	9

Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	1549.3
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	93:23
Delay Condition Met	Yes
Volume on Minor Street Approach During Same Hour	217
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	2455
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	Yes
Warrant Met for Intersection	Yes

Signal Warrants Report For Intersection 11: Ethanac Rd @ Sherman Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	Yes
#2	Four Hour Vehicular Volume	Yes
#3	Peak Hour	Yes

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S, N
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	E	W	S	N
1	529	966	660	156
2	508	927	634	150
3	497	908	620	147
4	423	773	528	125
5	402	734	502	119
6	360	657	449	106
7	333	609	416	98
8	317	580	396	94
9	254	464	317	75
10	238	435	297	70
11	238	435	297	70
12	227	415	284	67
13	206	377	257	61
14	190	348	238	56
15	190	348	238	56
16	185	338	231	55
17	106	193	132	31
18	58	106	73	17
19	53	97	66	16
20	21	39	26	6
21	16	29	20	5
22	16	29	20	5
23	11	19	13	3
24	11	19	13	3

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	1495	2	816	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	2	1435	2	784	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	2	1405	2	767	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	2	1196	2	653	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5	2	1136	2	621	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6	2	1017	2	555	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7	2	942	2	514	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8	2	897	2	490	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
9	2	718	2	392	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes
10	2	673	2	367	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes
11	2	673	2	367	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes
12	2	642	2	351	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes
13	2	583	2	318	No	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes
14	2	538	2	294	No	Yes	Yes	Yes	No	No	No	Yes	Yes	No
15	2	538	2	294	No	Yes	Yes	Yes	No	No	No	Yes	Yes	No
16	2	523	2	286	No	Yes	Yes	Yes	No	No	No	Yes	Yes	No
17	2	299	2	163	No	No	No	No	No	No	No	No	No	No
18	2	164	2	90	No	No	No	No	No	No	No	No	No	No
19	2	150	2	82	No	No	No	No	No	No	No	No	No	No
20	2	60	2	32	No	No	No	No	No	No	No	No	No	No
21	2	45	2	25	No	No	No	No	No	No	No	No	No	No
22	2	45	2	25	No	No	No	No	No	No	No	No	No	No
23	2	30	2	16	No	No	No	No	No	No	No	No	No	No
24	2	30	2	16	No	No	No	No	No	No	No	No	No	No
Hours Met					12	16	16	16	7	8	12	16	16	13

Warrant 3 Condition A

Orientation	S	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	10000	10000
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	1833:20	433:20
Delay Condition Met	Yes	Yes
Volume on Minor Street Approach During Same Hour	660	156
High Minor Volume Condition Met	Yes	Yes
Total Entering Volume on All Approaches During Same Hour	2311	2311
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Yes	Yes
Warrant Met for Approach	Yes	Yes
Warrant Met for Intersection	Yes	

Signal Warrants Report For Intersection 12: Ethanac Rd @ Dawson Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	Yes
#2	Four Hour Vehicular Volume	Yes
#3	Peak Hour	Yes

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	E	W	S
1	344	606	239
2	330	582	229
3	323	570	225
4	275	485	191
5	261	461	182
6	234	412	163
7	217	382	151
8	206	364	143
9	165	291	115
10	155	273	108
11	155	273	108
12	148	261	103
13	134	236	93
14	124	218	86
15	124	218	86
16	120	212	84
17	69	121	48
18	38	67	26
19	34	61	24
20	14	24	10
21	10	18	7
22	10	18	7
23	7	12	5
24	7	12	5

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	950	1	239	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	2	912	1	229	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	2	893	1	225	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
4	2	760	1	191	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
5	2	722	1	182	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
6	2	646	1	163	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No
7	2	599	1	151	No	Yes	Yes	Yes	No	No	No	Yes	Yes	No
8	2	570	1	143	No	Yes	Yes	Yes	No	No	No	Yes	Yes	No
9	2	456	1	115	No	No	Yes	Yes	No	No	No	No	No	No
10	2	428	1	108	No	No	Yes	Yes	No	No	No	No	No	No
11	2	428	1	108	No	No	Yes	Yes	No	No	No	No	No	No
12	2	409	1	103	No	No	No	Yes	No	No	No	No	No	No
13	2	370	1	93	No	No	No	Yes	No	No	No	No	No	No
14	2	342	1	86	No	No	No	Yes	No	No	No	No	No	No
15	2	342	1	86	No	No	No	Yes	No	No	No	No	No	No
16	2	332	1	84	No	No	No	No	No	No	No	No	No	No
17	2	190	1	48	No	No	No	No	No	No	No	No	No	No
18	2	105	1	26	No	No	No	No	No	No	No	No	No	No
19	2	95	1	24	No	No	No	No	No	No	No	No	No	No
20	2	38	1	10	No	No	No	No	No	No	No	No	No	No
21	2	28	1	7	No	No	No	No	No	No	No	No	No	No
22	2	28	1	7	No	No	No	No	No	No	No	No	No	No
23	2	19	1	5	No	No	No	No	No	No	No	No	No	No
24	2	19	1	5	No	No	No	No	No	No	No	No	No	No
Hours Met					6	8	11	15	2	5	6	8	8	4

Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	59.4
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	3:56
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	239
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	1189
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 13: Ethanac Rd @ Antelope Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S, NW
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	E	W	S	NW
1	314	466	53	16
2	301	447	51	15
3	295	438	50	15
4	251	373	42	13
5	239	354	40	12
6	214	317	36	11
7	198	294	33	10
8	188	280	32	10
9	151	224	25	8
10	141	210	24	7
11	141	210	24	7
12	135	200	23	7
13	122	182	21	6
14	113	168	19	6
15	113	168	19	6
16	110	163	19	6
17	63	93	11	3
18	35	51	6	2
19	31	47	5	2
20	13	19	2	1
21	9	14	2	0
22	9	14	2	0
23	6	9	1	0
24	6	9	1	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	3	780	2	69	No	No	No	No	No	No	Yes	Yes	No	No
2	3	748	2	66	No	No	No	No	No	No	No	Yes	No	No
3	3	733	2	65	No	No	No	No	No	No	No	Yes	No	No
4	3	624	2	55	No	No	No	No	No	No	No	Yes	No	No
5	3	593	2	52	No	No	No	No	No	No	No	No	No	No
6	3	531	2	47	No	No	No	No	No	No	No	No	No	No
7	3	492	2	43	No	No	No	No	No	No	No	No	No	No
8	3	468	2	42	No	No	No	No	No	No	No	No	No	No
9	3	375	2	33	No	No	No	No	No	No	No	No	No	No
10	3	351	2	31	No	No	No	No	No	No	No	No	No	No
11	3	351	2	31	No	No	No	No	No	No	No	No	No	No
12	3	335	2	30	No	No	No	No	No	No	No	No	No	No
13	3	304	2	27	No	No	No	No	No	No	No	No	No	No
14	3	281	2	25	No	No	No	No	No	No	No	No	No	No
15	3	281	2	25	No	No	No	No	No	No	No	No	No	No
16	3	273	2	25	No	No	No	No	No	No	No	No	No	No
17	3	156	2	14	No	No	No	No	No	No	No	No	No	No
18	3	86	2	8	No	No	No	No	No	No	No	No	No	No
19	3	78	2	7	No	No	No	No	No	No	No	No	No	No
20	3	32	2	3	No	No	No	No	No	No	No	No	No	No
21	3	23	2	2	No	No	No	No	No	No	No	No	No	No
22	3	23	2	2	No	No	No	No	No	No	No	No	No	No
23	3	15	2	1	No	No	No	No	No	No	No	No	No	No
24	3	15	2	1	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	1	4	0	0

Warrant 3 Condition A

Orientation	S	NW
Total Stopped Delay Per Vehicle on Minor Approach (s)	17.1	18.7
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:15	0:04
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	53	16
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	849	849
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Yes	Yes
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	

Signal Warrants Report For Intersection 17: Matthews Rd @ Palomar Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	SE, NW
Minor Approaches	N
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	SE	NW	N
1	157	483	266
2	151	464	255
3	148	454	250
4	126	386	213
5	119	367	202
6	107	328	181
7	99	304	168
8	94	290	160
9	75	232	128
10	71	217	120
11	71	217	120
12	68	208	114
13	61	188	104
14	57	174	96
15	57	174	96
16	55	169	93
17	31	97	53
18	17	53	29
19	16	48	27
20	6	19	11
21	5	14	8
22	5	14	8
23	3	10	5
24	3	10	5

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	640	2	266	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No
2	2	615	2	255	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes	No
3	2	602	2	250	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes	No
4	2	512	2	213	No	Yes	Yes	Yes	No	No	No	Yes	No	No
5	2	486	2	202	No	Yes	Yes	Yes	No	No	No	No	No	No
6	2	435	2	181	No	No	Yes	Yes	No	No	No	No	No	No
7	2	403	2	168	No	No	No	Yes	No	No	No	No	No	No
8	2	384	2	160	No	No	No	Yes	No	No	No	No	No	No
9	2	307	2	128	No	No	No	No	No	No	No	No	No	No
10	2	288	2	120	No	No	No	No	No	No	No	No	No	No
11	2	288	2	120	No	No	No	No	No	No	No	No	No	No
12	2	276	2	114	No	No	No	No	No	No	No	No	No	No
13	2	249	2	104	No	No	No	No	No	No	No	No	No	No
14	2	231	2	96	No	No	No	No	No	No	No	No	No	No
15	2	231	2	96	No	No	No	No	No	No	No	No	No	No
16	2	224	2	93	No	No	No	No	No	No	No	No	No	No
17	2	128	2	53	No	No	No	No	No	No	No	No	No	No
18	2	70	2	29	No	No	No	No	No	No	No	No	No	No
19	2	64	2	27	No	No	No	No	No	No	No	No	No	No
20	2	25	2	11	No	No	No	No	No	No	No	No	No	No
21	2	19	2	8	No	No	No	No	No	No	No	No	No	No
22	2	19	2	8	No	No	No	No	No	No	No	No	No	No
23	2	13	2	5	No	No	No	No	No	No	No	No	No	No
24	2	13	2	5	No	No	No	No	No	No	No	No	No	No
Hours Met					3	5	6	8	0	0	1	4	3	0

Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	13
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:57
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	266
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	906
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 18: McLaughlin Rd @ Murrieta Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E, W
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	S	N	E	W
1	441	607	17	18
2	423	583	16	17
3	415	571	16	17
4	353	486	14	14
5	335	461	13	14
6	300	413	12	12
7	278	382	11	11
8	265	364	10	11
9	212	291	8	9
10	198	273	8	8
11	198	273	8	8
12	190	261	7	8
13	172	237	7	7
14	159	219	6	6
15	159	219	6	6
16	154	212	6	6
17	88	121	3	4
18	49	67	2	2
19	44	61	2	2
20	18	24	1	1
21	13	18	1	1
22	13	18	1	1
23	9	12	0	0
24	9	12	0	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	4	1048	2	35	No	No	No	No	No	No	No	No	No	No
2	4	1006	2	33	No	No	No	No	No	No	No	No	No	No
3	4	986	2	33	No	No	No	No	No	No	No	No	No	No
4	4	839	2	28	No	No	No	No	No	No	No	No	No	No
5	4	796	2	27	No	No	No	No	No	No	No	No	No	No
6	4	713	2	24	No	No	No	No	No	No	No	No	No	No
7	4	660	2	22	No	No	No	No	No	No	No	No	No	No
8	4	629	2	21	No	No	No	No	No	No	No	No	No	No
9	4	503	2	17	No	No	No	No	No	No	No	No	No	No
10	4	471	2	16	No	No	No	No	No	No	No	No	No	No
11	4	471	2	16	No	No	No	No	No	No	No	No	No	No
12	4	451	2	15	No	No	No	No	No	No	No	No	No	No
13	4	409	2	14	No	No	No	No	No	No	No	No	No	No
14	4	378	2	12	No	No	No	No	No	No	No	No	No	No
15	4	378	2	12	No	No	No	No	No	No	No	No	No	No
16	4	366	2	12	No	No	No	No	No	No	No	No	No	No
17	4	209	2	7	No	No	No	No	No	No	No	No	No	No
18	4	116	2	4	No	No	No	No	No	No	No	No	No	No
19	4	105	2	4	No	No	No	No	No	No	No	No	No	No
20	4	42	2	2	No	No	No	No	No	No	No	No	No	No
21	4	31	2	2	No	No	No	No	No	No	No	No	No	No
22	4	31	2	2	No	No	No	No	No	No	No	No	No	No
23	4	21	2	0	No	No	No	No	No	No	No	No	No	No
24	4	21	2	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	14.3	22.7
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:04	0:06
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	17	18
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	1083	1083
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Yes	Yes
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	

Signal Warrants Report For Intersection 19: McLaughlin Rd @ Encanto Dr

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	E
1	191	164	143
2	183	157	137
3	180	154	134
4	153	131	114
5	145	125	109
6	130	112	97
7	120	103	90
8	115	98	86
9	92	79	69
10	86	74	64
11	86	74	64
12	82	71	61
13	74	64	56
14	69	59	51
15	69	59	51
16	67	57	50
17	38	33	29
18	21	18	16
19	19	16	14
20	8	7	6
21	6	5	4
22	6	5	4
23	4	3	3
24	4	3	3

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	355	1	143	No	No	No	Yes	No	No	No	No	No	No
2	2	340	1	137	No	No	No	Yes	No	No	No	No	No	No
3	2	334	1	134	No	No	No	No	No	No	No	No	No	No
4	2	284	1	114	No	No	No	No	No	No	No	No	No	No
5	2	270	1	109	No	No	No	No	No	No	No	No	No	No
6	2	242	1	97	No	No	No	No	No	No	No	No	No	No
7	2	223	1	90	No	No	No	No	No	No	No	No	No	No
8	2	213	1	86	No	No	No	No	No	No	No	No	No	No
9	2	171	1	69	No	No	No	No	No	No	No	No	No	No
10	2	160	1	64	No	No	No	No	No	No	No	No	No	No
11	2	160	1	64	No	No	No	No	No	No	No	No	No	No
12	2	153	1	61	No	No	No	No	No	No	No	No	No	No
13	2	138	1	56	No	No	No	No	No	No	No	No	No	No
14	2	128	1	51	No	No	No	No	No	No	No	No	No	No
15	2	128	1	51	No	No	No	No	No	No	No	No	No	No
16	2	124	1	50	No	No	No	No	No	No	No	No	No	No
17	2	71	1	29	No	No	No	No	No	No	No	No	No	No
18	2	39	1	16	No	No	No	No	No	No	No	No	No	No
19	2	35	1	14	No	No	No	No	No	No	No	No	No	No
20	2	15	1	6	No	No	No	No	No	No	No	No	No	No
21	2	11	1	4	No	No	No	No	No	No	No	No	No	No
22	2	11	1	4	No	No	No	No	No	No	No	No	No	No
23	2	7	1	3	No	No	No	No	No	No	No	No	No	No
24	2	7	1	3	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	2	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E
Total Stopped Delay Per Vehicle on Minor Approach (s)	12.3
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:29
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	143
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	498
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 20: McLaughlin Rd @ Trumble Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E, W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	S	N	E	W
1	39	27	70	91
2	37	26	67	87
3	37	25	66	86
4	31	22	56	73
5	30	21	53	69
6	27	18	48	62
7	25	17	44	57
8	23	16	42	55
9	19	13	34	44
10	18	12	32	41
11	18	12	32	41
12	17	12	30	39
13	15	11	27	35
14	14	10	25	33
15	14	10	25	33
16	14	9	25	32
17	8	5	14	18
18	4	3	8	10
19	4	3	7	9
20	2	1	3	4
21	1	1	2	3
22	1	1	2	3
23	1	1	1	2
24	1	1	1	2

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	66	2	161	No	No	No	No	No	No	No	No	No	No
2	2	63	2	154	No	No	No	No	No	No	No	No	No	No
3	2	62	2	152	No	No	No	No	No	No	No	No	No	No
4	2	53	2	129	No	No	No	No	No	No	No	No	No	No
5	2	51	2	122	No	No	No	No	No	No	No	No	No	No
6	2	45	2	110	No	No	No	No	No	No	No	No	No	No
7	2	42	2	101	No	No	No	No	No	No	No	No	No	No
8	2	39	2	97	No	No	No	No	No	No	No	No	No	No
9	2	32	2	78	No	No	No	No	No	No	No	No	No	No
10	2	30	2	73	No	No	No	No	No	No	No	No	No	No
11	2	30	2	73	No	No	No	No	No	No	No	No	No	No
12	2	29	2	69	No	No	No	No	No	No	No	No	No	No
13	2	26	2	62	No	No	No	No	No	No	No	No	No	No
14	2	24	2	58	No	No	No	No	No	No	No	No	No	No
15	2	24	2	58	No	No	No	No	No	No	No	No	No	No
16	2	23	2	57	No	No	No	No	No	No	No	No	No	No
17	2	13	2	32	No	No	No	No	No	No	No	No	No	No
18	2	7	2	18	No	No	No	No	No	No	No	No	No	No
19	2	7	2	16	No	No	No	No	No	No	No	No	No	No
20	2	3	2	7	No	No	No	No	No	No	No	No	No	No
21	2	2	2	5	No	No	No	No	No	No	No	No	No	No
22	2	2	2	5	No	No	No	No	No	No	No	No	No	No
23	2	2	2	3	No	No	No	No	No	No	No	No	No	No
24	2	2	2	3	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	7.6	7.5
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:08	0:11
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	70	91
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	227	227
Number of Approaches on Intersection	4	4
Total Volume Condition Met	No	No
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	

Signal Warrants Report For Intersection 21: McLaughlin Rd @ Sherman Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E, W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	S	N	E	W
1	5	72	0	44
2	5	69	0	42
3	5	68	0	41
4	4	58	0	35
5	4	55	0	33
6	3	49	0	30
7	3	45	0	28
8	3	43	0	26
9	2	35	0	21
10	2	32	0	20
11	2	32	0	20
12	2	31	0	19
13	2	28	0	17
14	2	26	0	16
15	2	26	0	16
16	2	25	0	15
17	1	14	0	9
18	1	8	0	5
19	1	7	0	4
20	0	3	0	2
21	0	2	0	1
22	0	2	0	1
23	0	1	0	1
24	0	1	0	1

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	77	2	44	No	No	No	No	No	No	No	No	No	No
2	2	74	2	42	No	No	No	No	No	No	No	No	No	No
3	2	73	2	41	No	No	No	No	No	No	No	No	No	No
4	2	62	2	35	No	No	No	No	No	No	No	No	No	No
5	2	59	2	33	No	No	No	No	No	No	No	No	No	No
6	2	52	2	30	No	No	No	No	No	No	No	No	No	No
7	2	48	2	28	No	No	No	No	No	No	No	No	No	No
8	2	46	2	26	No	No	No	No	No	No	No	No	No	No
9	2	37	2	21	No	No	No	No	No	No	No	No	No	No
10	2	34	2	20	No	No	No	No	No	No	No	No	No	No
11	2	34	2	20	No	No	No	No	No	No	No	No	No	No
12	2	33	2	19	No	No	No	No	No	No	No	No	No	No
13	2	30	2	17	No	No	No	No	No	No	No	No	No	No
14	2	28	2	16	No	No	No	No	No	No	No	No	No	No
15	2	28	2	16	No	No	No	No	No	No	No	No	No	No
16	2	27	2	15	No	No	No	No	No	No	No	No	No	No
17	2	15	2	9	No	No	No	No	No	No	No	No	No	No
18	2	9	2	5	No	No	No	No	No	No	No	No	No	No
19	2	8	2	4	No	No	No	No	No	No	No	No	No	No
20	2	3	2	2	No	No	No	No	No	No	No	No	No	No
21	2	2	2	1	No	No	No	No	No	No	No	No	No	No
22	2	2	2	1	No	No	No	No	No	No	No	No	No	No
23	2	1	2	1	No	No	No	No	No	No	No	No	No	No
24	2	1	2	1	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	8.9	9
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:00	0:06
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	0	44
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	121	121
Number of Approaches on Intersection	4	4
Total Volume Condition Met	No	No
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	

Signal Warrants Report For Intersection 22: Rouse Rd @ Murrieta Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E, W
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	S	N	E	W
1	400	517	111	42
2	384	496	107	40
3	376	486	104	39
4	320	414	89	34
5	304	393	84	32
6	272	352	75	29
7	252	326	70	26
8	240	310	67	25
9	192	248	53	20
10	180	233	50	19
11	180	233	50	19
12	172	222	48	18
13	156	202	43	16
14	144	186	40	15
15	144	186	40	15
16	140	181	39	15
17	80	103	22	8
18	44	57	12	5
19	40	52	11	4
20	16	21	4	2
21	12	16	3	1
22	12	16	3	1
23	8	10	2	1
24	8	10	2	1

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	6	917	6	153	No	No	No	No	Yes	Yes	Yes	Yes	Yes	No
2	6	880	6	147	No	No	No	No	No	Yes	Yes	Yes	Yes	No
3	6	862	6	143	No	No	No	No	No	Yes	Yes	Yes	Yes	No
4	6	734	6	123	No	No	No	No	No	Yes	Yes	Yes	No	No
5	6	697	6	116	No	No	No	No	No	No	Yes	Yes	No	No
6	6	624	6	104	No	No	No	No	No	No	No	Yes	No	No
7	6	578	6	96	No	No	No	No	No	No	No	Yes	No	No
8	6	550	6	92	No	No	No	No	No	No	No	Yes	No	No
9	6	440	6	73	No	No	No	No	No	No	No	No	No	No
10	6	413	6	69	No	No	No	No	No	No	No	No	No	No
11	6	413	6	69	No	No	No	No	No	No	No	No	No	No
12	6	394	6	66	No	No	No	No	No	No	No	No	No	No
13	6	358	6	59	No	No	No	No	No	No	No	No	No	No
14	6	330	6	55	No	No	No	No	No	No	No	No	No	No
15	6	330	6	55	No	No	No	No	No	No	No	No	No	No
16	6	321	6	54	No	No	No	No	No	No	No	No	No	No
17	6	183	6	30	No	No	No	No	No	No	No	No	No	No
18	6	101	6	17	No	No	No	No	No	No	No	No	No	No
19	6	92	6	15	No	No	No	No	No	No	No	No	No	No
20	6	37	6	6	No	No	No	No	No	No	No	No	No	No
21	6	28	6	4	No	No	No	No	No	No	No	No	No	No
22	6	28	6	4	No	No	No	No	No	No	No	No	No	No
23	6	18	6	3	No	No	No	No	No	No	No	No	No	No
24	6	18	6	3	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	1	4	5	8	3	0

Warrant 3 Condition A

Orientation	E	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	14.9	25.9
Number of Lanes on Minor Street Approach	3	3
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:27	0:18
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	111	42
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	1070	1070
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Yes	Yes
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	

Signal Warrants Report For Intersection 23: Rouse Rd @ Encanto Dr

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	E
1	231	241	52
2	222	231	50
3	217	227	49
4	185	193	42
5	176	183	40
6	157	164	35
7	146	152	33
8	139	145	31
9	111	116	25
10	104	108	23
11	104	108	23
12	99	104	22
13	90	94	20
14	83	87	19
15	83	87	19
16	81	84	18
17	46	48	10
18	25	27	6
19	23	24	5
20	9	10	2
21	7	7	2
22	7	7	2
23	5	5	1
24	5	5	1

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	472	1	52	No	No	No	No	No	No	No	No	No	No
2	2	453	1	50	No	No	No	No	No	No	No	No	No	No
3	2	444	1	49	No	No	No	No	No	No	No	No	No	No
4	2	378	1	42	No	No	No	No	No	No	No	No	No	No
5	2	359	1	40	No	No	No	No	No	No	No	No	No	No
6	2	321	1	35	No	No	No	No	No	No	No	No	No	No
7	2	298	1	33	No	No	No	No	No	No	No	No	No	No
8	2	284	1	31	No	No	No	No	No	No	No	No	No	No
9	2	227	1	25	No	No	No	No	No	No	No	No	No	No
10	2	212	1	23	No	No	No	No	No	No	No	No	No	No
11	2	212	1	23	No	No	No	No	No	No	No	No	No	No
12	2	203	1	22	No	No	No	No	No	No	No	No	No	No
13	2	184	1	20	No	No	No	No	No	No	No	No	No	No
14	2	170	1	19	No	No	No	No	No	No	No	No	No	No
15	2	170	1	19	No	No	No	No	No	No	No	No	No	No
16	2	165	1	18	No	No	No	No	No	No	No	No	No	No
17	2	94	1	10	No	No	No	No	No	No	No	No	No	No
18	2	52	1	6	No	No	No	No	No	No	No	No	No	No
19	2	47	1	5	No	No	No	No	No	No	No	No	No	No
20	2	19	1	2	No	No	No	No	No	No	No	No	No	No
21	2	14	1	2	No	No	No	No	No	No	No	No	No	No
22	2	14	1	2	No	No	No	No	No	No	No	No	No	No
23	2	10	1	1	No	No	No	No	No	No	No	No	No	No
24	2	10	1	1	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E
Total Stopped Delay Per Vehicle on Minor Approach (s)	11.5
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:09
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	52
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	524
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 28: Sherman Rd @ Project dwy 1

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	E
1	382	406	334
2	367	390	321
3	359	382	314
4	306	325	267
5	290	309	254
6	260	276	227
7	241	256	210
8	229	244	200
9	183	195	160
10	172	183	150
11	172	183	150
12	164	175	144
13	149	158	130
14	138	146	120
15	138	146	120
16	134	142	117
17	76	81	67
18	42	45	37
19	38	41	33
20	15	16	13
21	11	12	10
22	11	12	10
23	8	8	7
24	8	8	7

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	3	788	1	334	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
2	3	757	1	321	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
3	3	741	1	314	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
4	3	631	1	267	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No	No
5	3	599	1	254	No	Yes	Yes	Yes	No	No	No	Yes	No	No
6	3	536	1	227	No	Yes	Yes	Yes	No	No	No	Yes	No	No
7	3	497	1	210	No	Yes	Yes	Yes	No	No	No	No	No	No
8	3	473	1	200	No	No	Yes	Yes	No	No	No	No	No	No
9	3	378	1	160	No	No	No	Yes	No	No	No	No	No	No
10	3	355	1	150	No	No	No	Yes	No	No	No	No	No	No
11	3	355	1	150	No	No	No	Yes	No	No	No	No	No	No
12	3	339	1	144	No	No	No	Yes	No	No	No	No	No	No
13	3	307	1	130	No	No	No	No	No	No	No	No	No	No
14	3	284	1	120	No	No	No	No	No	No	No	No	No	No
15	3	284	1	120	No	No	No	No	No	No	No	No	No	No
16	3	276	1	117	No	No	No	No	No	No	No	No	No	No
17	3	157	1	67	No	No	No	No	No	No	No	No	No	No
18	3	87	1	37	No	No	No	No	No	No	No	No	No	No
19	3	79	1	33	No	No	No	No	No	No	No	No	No	No
20	3	31	1	13	No	No	No	No	No	No	No	No	No	No
21	3	23	1	10	No	No	No	No	No	No	No	No	No	No
22	3	23	1	10	No	No	No	No	No	No	No	No	No	No
23	3	16	1	7	No	No	No	No	No	No	No	No	No	No
24	3	16	1	7	No	No	No	No	No	No	No	No	No	No
Hours Met					4	7	8	12	0	3	4	6	3	0

Warrant 3 Condition A

Orientation	E
Total Stopped Delay Per Vehicle on Minor Approach (s)	22.5
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	2:05
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	334
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	1122
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 29: Sherman Rd @ Project dwy 2

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	W
1	374	254	10
2	359	244	10
3	352	239	9
4	299	203	8
5	284	193	8
6	254	173	7
7	236	160	6
8	224	152	6
9	180	122	5
10	168	114	5
11	168	114	5
12	161	109	4
13	146	99	4
14	135	91	4
15	135	91	4
16	131	89	4
17	75	51	2
18	41	28	1
19	37	25	1
20	15	10	0
21	11	8	0
22	11	8	0
23	7	5	0
24	7	5	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	628	1	10	No	No	No	No	No	No	No	No	No	No
2	2	603	1	10	No	No	No	No	No	No	No	No	No	No
3	2	591	1	9	No	No	No	No	No	No	No	No	No	No
4	2	502	1	8	No	No	No	No	No	No	No	No	No	No
5	2	477	1	8	No	No	No	No	No	No	No	No	No	No
6	2	427	1	7	No	No	No	No	No	No	No	No	No	No
7	2	396	1	6	No	No	No	No	No	No	No	No	No	No
8	2	376	1	6	No	No	No	No	No	No	No	No	No	No
9	2	302	1	5	No	No	No	No	No	No	No	No	No	No
10	2	282	1	5	No	No	No	No	No	No	No	No	No	No
11	2	282	1	5	No	No	No	No	No	No	No	No	No	No
12	2	270	1	4	No	No	No	No	No	No	No	No	No	No
13	2	245	1	4	No	No	No	No	No	No	No	No	No	No
14	2	226	1	4	No	No	No	No	No	No	No	No	No	No
15	2	226	1	4	No	No	No	No	No	No	No	No	No	No
16	2	220	1	4	No	No	No	No	No	No	No	No	No	No
17	2	126	1	2	No	No	No	No	No	No	No	No	No	No
18	2	69	1	1	No	No	No	No	No	No	No	No	No	No
19	2	62	1	1	No	No	No	No	No	No	No	No	No	No
20	2	25	1	0	No	No	No	No	No	No	No	No	No	No
21	2	19	1	0	No	No	No	No	No	No	No	No	No	No
22	2	19	1	0	No	No	No	No	No	No	No	No	No	No
23	2	12	1	0	No	No	No	No	No	No	No	No	No	No
24	2	12	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	13.2
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:02
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	10
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	638
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 30: Sherman Rd @ Project dwy 3

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	N, S
Minor Approaches	E, W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	N	S	E	W
1	249	79	351	0
2	239	76	337	0
3	234	74	330	0
4	199	63	281	0
5	189	60	267	0
6	169	54	239	0
7	157	50	221	0
8	149	47	211	0
9	120	38	168	0
10	112	36	158	0
11	112	36	158	0
12	107	34	151	0
13	97	31	137	0
14	90	28	126	0
15	90	28	126	0
16	87	28	123	0
17	50	16	70	0
18	27	9	39	0
19	25	8	35	0
20	10	3	14	0
21	7	2	11	0
22	7	2	11	0
23	5	2	7	0
24	5	2	7	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	3	328	2	351	No	No	No	No	No	No	No	No	No	No
2	3	315	2	337	No	No	No	No	No	No	No	No	No	No
3	3	308	2	330	No	No	No	No	No	No	No	No	No	No
4	3	262	2	281	No	No	No	No	No	No	No	No	No	No
5	3	249	2	267	No	No	No	No	No	No	No	No	No	No
6	3	223	2	239	No	No	No	No	No	No	No	No	No	No
7	3	207	2	221	No	No	No	No	No	No	No	No	No	No
8	3	196	2	211	No	No	No	No	No	No	No	No	No	No
9	3	158	2	168	No	No	No	No	No	No	No	No	No	No
10	3	148	2	158	No	No	No	No	No	No	No	No	No	No
11	3	148	2	158	No	No	No	No	No	No	No	No	No	No
12	3	141	2	151	No	No	No	No	No	No	No	No	No	No
13	3	128	2	137	No	No	No	No	No	No	No	No	No	No
14	3	118	2	126	No	No	No	No	No	No	No	No	No	No
15	3	118	2	126	No	No	No	No	No	No	No	No	No	No
16	3	115	2	123	No	No	No	No	No	No	No	No	No	No
17	3	66	2	70	No	No	No	No	No	No	No	No	No	No
18	3	36	2	39	No	No	No	No	No	No	No	No	No	No
19	3	33	2	35	No	No	No	No	No	No	No	No	No	No
20	3	13	2	14	No	No	No	No	No	No	No	No	No	No
21	3	9	2	11	No	No	No	No	No	No	No	No	No	No
22	3	9	2	11	No	No	No	No	No	No	No	No	No	No
23	3	7	2	7	No	No	No	No	No	No	No	No	No	No
24	3	7	2	7	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	12.2	15.1
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	1:11	0:00
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	351	0
High Minor Volume Condition Met	Yes	No
Total Entering Volume on All Approaches During Same Hour	679	679
Number of Approaches on Intersection	4	4
Total Volume Condition Met	No	No
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	

Signal Warrants Report For Intersection 31: Trumble Rd @ Project dwy 4

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	E
1	19	7	10
2	18	7	10
3	18	7	9
4	15	6	8
5	14	5	8
6	13	5	7
7	12	4	6
8	11	4	6
9	9	3	5
10	9	3	5
11	9	3	5
12	8	3	4
13	7	3	4
14	7	3	4
15	7	3	4
16	7	2	4
17	4	1	2
18	2	1	1
19	2	1	1
20	1	0	0
21	1	0	0
22	1	0	0
23	0	0	0
24	0	0	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	26	1	10	No	No	No	No	No	No	No	No	No	No
2	2	25	1	10	No	No	No	No	No	No	No	No	No	No
3	2	25	1	9	No	No	No	No	No	No	No	No	No	No
4	2	21	1	8	No	No	No	No	No	No	No	No	No	No
5	2	19	1	8	No	No	No	No	No	No	No	No	No	No
6	2	18	1	7	No	No	No	No	No	No	No	No	No	No
7	2	16	1	6	No	No	No	No	No	No	No	No	No	No
8	2	15	1	6	No	No	No	No	No	No	No	No	No	No
9	2	12	1	5	No	No	No	No	No	No	No	No	No	No
10	2	12	1	5	No	No	No	No	No	No	No	No	No	No
11	2	12	1	5	No	No	No	No	No	No	No	No	No	No
12	2	11	1	4	No	No	No	No	No	No	No	No	No	No
13	2	10	1	4	No	No	No	No	No	No	No	No	No	No
14	2	10	1	4	No	No	No	No	No	No	No	No	No	No
15	2	10	1	4	No	No	No	No	No	No	No	No	No	No
16	2	9	1	4	No	No	No	No	No	No	No	No	No	No
17	2	5	1	2	No	No	No	No	No	No	No	No	No	No
18	2	3	1	1	No	No	No	No	No	No	No	No	No	No
19	2	3	1	1	No	No	No	No	No	No	No	No	No	No
20	2	1	1	0	No	No	No	No	No	No	No	No	No	No
21	2	1	1	0	No	No	No	No	No	No	No	No	No	No
22	2	1	1	0	No	No	No	No	No	No	No	No	No	No
23	2	0	1	0	No	No	No	No	No	No	No	No	No	No
24	2	0	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E
Total Stopped Delay Per Vehicle on Minor Approach (s)	8.7
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:01
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	10
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	36
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 32: Trumble Rd @ Project dwy 5

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	E
1	25	17	10
2	24	16	10
3	24	16	9
4	20	14	8
5	19	13	8
6	17	12	7
7	16	11	6
8	15	10	6
9	12	8	5
10	11	8	5
11	11	8	5
12	11	7	4
13	10	7	4
14	9	6	4
15	9	6	4
16	9	6	4
17	5	3	2
18	3	2	1
19	3	2	1
20	1	1	0
21	1	1	0
22	1	1	0
23	1	0	0
24	1	0	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	42	1	10	No	No	No	No	No	No	No	No	No	No
2	2	40	1	10	No	No	No	No	No	No	No	No	No	No
3	2	40	1	9	No	No	No	No	No	No	No	No	No	No
4	2	34	1	8	No	No	No	No	No	No	No	No	No	No
5	2	32	1	8	No	No	No	No	No	No	No	No	No	No
6	2	29	1	7	No	No	No	No	No	No	No	No	No	No
7	2	27	1	6	No	No	No	No	No	No	No	No	No	No
8	2	25	1	6	No	No	No	No	No	No	No	No	No	No
9	2	20	1	5	No	No	No	No	No	No	No	No	No	No
10	2	19	1	5	No	No	No	No	No	No	No	No	No	No
11	2	19	1	5	No	No	No	No	No	No	No	No	No	No
12	2	18	1	4	No	No	No	No	No	No	No	No	No	No
13	2	17	1	4	No	No	No	No	No	No	No	No	No	No
14	2	15	1	4	No	No	No	No	No	No	No	No	No	No
15	2	15	1	4	No	No	No	No	No	No	No	No	No	No
16	2	15	1	4	No	No	No	No	No	No	No	No	No	No
17	2	8	1	2	No	No	No	No	No	No	No	No	No	No
18	2	5	1	1	No	No	No	No	No	No	No	No	No	No
19	2	5	1	1	No	No	No	No	No	No	No	No	No	No
20	2	2	1	0	No	No	No	No	No	No	No	No	No	No
21	2	2	1	0	No	No	No	No	No	No	No	No	No	No
22	2	2	1	0	No	No	No	No	No	No	No	No	No	No
23	2	1	1	0	No	No	No	No	No	No	No	No	No	No
24	2	1	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E
Total Stopped Delay Per Vehicle on Minor Approach (s)	8.8
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:01
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	10
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	52
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 33: Dawson Rd @ Project dwy 6

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	W
1	96	152	143
2	92	146	137
3	90	143	134
4	77	122	114
5	73	116	109
6	65	103	97
7	60	96	90
8	58	91	86
9	46	73	69
10	43	68	64
11	43	68	64
12	41	65	61
13	37	59	56
14	35	55	51
15	35	55	51
16	34	53	50
17	19	30	29
18	11	17	16
19	10	15	14
20	4	6	6
21	3	5	4
22	3	5	4
23	2	3	3
24	2	3	3

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	248	1	143	No	No	No	No	No	No	No	No	No	No
2	2	238	1	137	No	No	No	No	No	No	No	No	No	No
3	2	233	1	134	No	No	No	No	No	No	No	No	No	No
4	2	199	1	114	No	No	No	No	No	No	No	No	No	No
5	2	189	1	109	No	No	No	No	No	No	No	No	No	No
6	2	168	1	97	No	No	No	No	No	No	No	No	No	No
7	2	156	1	90	No	No	No	No	No	No	No	No	No	No
8	2	149	1	86	No	No	No	No	No	No	No	No	No	No
9	2	119	1	69	No	No	No	No	No	No	No	No	No	No
10	2	111	1	64	No	No	No	No	No	No	No	No	No	No
11	2	111	1	64	No	No	No	No	No	No	No	No	No	No
12	2	106	1	61	No	No	No	No	No	No	No	No	No	No
13	2	96	1	56	No	No	No	No	No	No	No	No	No	No
14	2	90	1	51	No	No	No	No	No	No	No	No	No	No
15	2	90	1	51	No	No	No	No	No	No	No	No	No	No
16	2	87	1	50	No	No	No	No	No	No	No	No	No	No
17	2	49	1	29	No	No	No	No	No	No	No	No	No	No
18	2	28	1	16	No	No	No	No	No	No	No	No	No	No
19	2	25	1	14	No	No	No	No	No	No	No	No	No	No
20	2	10	1	6	No	No	No	No	No	No	No	No	No	No
21	2	8	1	4	No	No	No	No	No	No	No	No	No	No
22	2	8	1	4	No	No	No	No	No	No	No	No	No	No
23	2	5	1	3	No	No	No	No	No	No	No	No	No	No
24	2	5	1	3	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	10.8
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:25
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	143
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	391
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

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Signal Warrants Report For Intersection 34: Dawson Rd @ Project dwy 7

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	N, S
Minor Approaches	W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	N	S	W
1	64	1	95
2	61	1	91
3	60	1	89
4	51	1	76
5	49	1	72
6	44	1	65
7	40	1	60
8	38	1	57
9	31	0	46
10	29	0	43
11	29	0	43
12	28	0	41
13	25	0	37
14	23	0	34
15	23	0	34
16	22	0	33
17	13	0	19
18	7	0	10
19	6	0	10
20	3	0	4
21	2	0	3
22	2	0	3
23	1	0	2
24	1	0	2

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	65	1	95	No	No	No	No	No	No	No	No	No	No
2	2	62	1	91	No	No	No	No	No	No	No	No	No	No
3	2	61	1	89	No	No	No	No	No	No	No	No	No	No
4	2	52	1	76	No	No	No	No	No	No	No	No	No	No
5	2	50	1	72	No	No	No	No	No	No	No	No	No	No
6	2	45	1	65	No	No	No	No	No	No	No	No	No	No
7	2	41	1	60	No	No	No	No	No	No	No	No	No	No
8	2	39	1	57	No	No	No	No	No	No	No	No	No	No
9	2	31	1	46	No	No	No	No	No	No	No	No	No	No
10	2	29	1	43	No	No	No	No	No	No	No	No	No	No
11	2	29	1	43	No	No	No	No	No	No	No	No	No	No
12	2	28	1	41	No	No	No	No	No	No	No	No	No	No
13	2	25	1	37	No	No	No	No	No	No	No	No	No	No
14	2	23	1	34	No	No	No	No	No	No	No	No	No	No
15	2	23	1	34	No	No	No	No	No	No	No	No	No	No
16	2	22	1	33	No	No	No	No	No	No	No	No	No	No
17	2	13	1	19	No	No	No	No	No	No	No	No	No	No
18	2	7	1	10	No	No	No	No	No	No	No	No	No	No
19	2	6	1	10	No	No	No	No	No	No	No	No	No	No
20	2	3	1	4	No	No	No	No	No	No	No	No	No	No
21	2	2	1	3	No	No	No	No	No	No	No	No	No	No
22	2	2	1	3	No	No	No	No	No	No	No	No	No	No
23	2	1	1	2	No	No	No	No	No	No	No	No	No	No
24	2	1	1	2	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	9.1
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:14
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	95
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	160
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 9: Ethanac Rd @ Encanto Dr

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	Yes
#2	Four Hour Vehicular Volume	Yes
#3	Peak Hour	Yes

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	E	W	S
1	859	1458	189
2	825	1400	181
3	807	1371	178
4	687	1166	151
5	653	1108	144
6	584	991	129
7	541	919	119
8	515	875	113
9	412	700	91
10	387	656	85
11	387	656	85
12	369	627	81
13	335	569	74
14	309	525	68
15	309	525	68
16	301	510	66
17	172	292	38
18	94	160	21
19	86	146	19
20	34	58	8
21	26	44	6
22	26	44	6
23	17	29	4
24	17	29	4

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	3	2317	1	189	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	3	2225	1	181	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	3	2178	1	178	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	3	1853	1	151	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5	3	1761	1	144	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6	3	1575	1	129	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7	3	1460	1	119	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8	3	1390	1	113	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
9	3	1112	1	91	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No
10	3	1043	1	85	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No
11	3	1043	1	85	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No
12	3	996	1	81	No	No	No	No	Yes	Yes	Yes	Yes	Yes	No
13	3	904	1	74	No	No	No	No	No	Yes	Yes	Yes	Yes	No
14	3	834	1	68	No	No	No	No	No	Yes	Yes	Yes	No	No
15	3	834	1	68	No	No	No	No	No	Yes	Yes	Yes	No	No
16	3	811	1	66	No	No	No	No	No	Yes	Yes	Yes	No	No
17	3	464	1	38	No	No	No	No	No	No	No	No	No	No
18	3	254	1	21	No	No	No	No	No	No	No	No	No	No
19	3	232	1	19	No	No	No	No	No	No	No	No	No	No
20	3	92	1	8	No	No	No	No	No	No	No	No	No	No
21	3	70	1	6	No	No	No	No	No	No	No	No	No	No
22	3	70	1	6	No	No	No	No	No	No	No	No	No	No
23	3	46	1	4	No	No	No	No	No	No	No	No	No	No
24	3	46	1	4	No	No	No	No	No	No	No	No	No	No
Hours Met					4	6	8	11	12	16	16	16	13	8

Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	1512.7
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	79:24
Delay Condition Met	Yes
Volume on Minor Street Approach During Same Hour	189
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	2506
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	Yes
Warrant Met for Intersection	Yes

Signal Warrants Report For Intersection 11: Ethanac Rd @ Sherman Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	Yes
#2	Four Hour Vehicular Volume	Yes
#3	Peak Hour	Yes

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S, N
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	E	W	S	N
1	608	1273	153	208
2	584	1222	147	200
3	572	1197	144	196
4	486	1018	122	166
5	462	967	116	158
6	413	866	104	141
7	383	802	96	131
8	365	764	92	125
9	292	611	73	100
10	274	573	69	94
11	274	573	69	94
12	261	547	66	89
13	237	496	60	81
14	219	458	55	75
15	219	458	55	75
16	213	446	54	73
17	122	255	31	42
18	67	140	17	23
19	61	127	15	21
20	24	51	6	8
21	18	38	5	6
22	18	38	5	6
23	12	25	3	4
24	12	25	3	4

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	1881	2	361	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	2	1806	2	347	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	2	1769	2	340	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	2	1504	2	288	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5	2	1429	2	274	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6	2	1279	2	245	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7	2	1185	2	227	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8	2	1129	2	217	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
9	2	903	2	173	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No
10	2	847	2	163	No	No	No	Yes	No	Yes	Yes	Yes	Yes	No
11	2	847	2	163	No	No	No	Yes	No	Yes	Yes	Yes	Yes	No
12	2	808	2	155	No	No	No	Yes	No	Yes	Yes	Yes	Yes	No
13	2	733	2	141	No	No	No	No	No	Yes	Yes	Yes	No	No
14	2	677	2	130	No	No	No	No	No	No	Yes	Yes	No	No
15	2	677	2	130	No	No	No	No	No	No	Yes	Yes	No	No
16	2	659	2	127	No	No	No	No	No	No	Yes	Yes	No	No
17	2	377	2	73	No	No	No	No	No	No	No	No	No	No
18	2	207	2	40	No	No	No	No	No	No	No	No	No	No
19	2	188	2	36	No	No	No	No	No	No	No	No	No	No
20	2	75	2	14	No	No	No	No	No	No	No	No	No	No
21	2	56	2	11	No	No	No	No	No	No	No	No	No	No
22	2	56	2	11	No	No	No	No	No	No	No	No	No	No
23	2	37	2	7	No	No	No	No	No	No	No	No	No	No
24	2	37	2	7	No	No	No	No	No	No	No	No	No	No
Hours Met					5	8	8	12	9	13	16	16	12	8

Warrant 3 Condition A

Orientation	S	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	10000	1991.1
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	425:00	115:02
Delay Condition Met	Yes	Yes
Volume on Minor Street Approach During Same Hour	153	208
High Minor Volume Condition Met	Yes	Yes
Total Entering Volume on All Approaches During Same Hour	2242	2242
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Yes	Yes
Warrant Met for Approach	Yes	Yes
Warrant Met for Intersection	Yes	

Signal Warrants Report For Intersection 12: Ethanac Rd @ Dawson Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	E	W	S
1	561	758	54
2	539	728	52
3	527	713	51
4	449	606	43
5	426	576	41
6	381	515	37
7	353	478	34
8	337	455	32
9	269	364	26
10	252	341	24
11	252	341	24
12	241	326	23
13	219	296	21
14	202	273	19
15	202	273	19
16	196	265	19
17	112	152	11
18	62	83	6
19	56	76	5
20	22	30	2
21	17	23	2
22	17	23	2
23	11	15	1
24	11	15	1

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	1319	1	54	No	No	No	No	No	No	Yes	Yes	No	No
2	2	1267	1	52	No	No	No	No	No	No	Yes	Yes	No	No
3	2	1240	1	51	No	No	No	No	No	No	No	Yes	No	No
4	2	1055	1	43	No	No	No	No	No	No	No	Yes	No	No
5	2	1002	1	41	No	No	No	No	No	No	No	No	No	No
6	2	896	1	37	No	No	No	No	No	No	No	No	No	No
7	2	831	1	34	No	No	No	No	No	No	No	No	No	No
8	2	792	1	32	No	No	No	No	No	No	No	No	No	No
9	2	633	1	26	No	No	No	No	No	No	No	No	No	No
10	2	593	1	24	No	No	No	No	No	No	No	No	No	No
11	2	593	1	24	No	No	No	No	No	No	No	No	No	No
12	2	567	1	23	No	No	No	No	No	No	No	No	No	No
13	2	515	1	21	No	No	No	No	No	No	No	No	No	No
14	2	475	1	19	No	No	No	No	No	No	No	No	No	No
15	2	475	1	19	No	No	No	No	No	No	No	No	No	No
16	2	461	1	19	No	No	No	No	No	No	No	No	No	No
17	2	264	1	11	No	No	No	No	No	No	No	No	No	No
18	2	145	1	6	No	No	No	No	No	No	No	No	No	No
19	2	132	1	5	No	No	No	No	No	No	No	No	No	No
20	2	52	1	2	No	No	No	No	No	No	No	No	No	No
21	2	40	1	2	No	No	No	No	No	No	No	No	No	No
22	2	40	1	2	No	No	No	No	No	No	No	No	No	No
23	2	26	1	1	No	No	No	No	No	No	No	No	No	No
24	2	26	1	1	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	2	4	0	0

Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	33.6
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:30
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	54
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	1373
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 13: Ethanac Rd @ Antelope Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S, NW
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	E	W	S	NW
1	600	590	12	18
2	576	566	12	17
3	564	555	11	17
4	480	472	10	14
5	456	448	9	14
6	408	401	8	12
7	378	372	8	11
8	360	354	7	11
9	288	283	6	9
10	270	266	5	8
11	270	266	5	8
12	258	254	5	8
13	234	230	5	7
14	216	212	4	6
15	216	212	4	6
16	210	207	4	6
17	120	118	2	4
18	66	65	1	2
19	60	59	1	2
20	24	24	0	1
21	18	18	0	1
22	18	18	0	1
23	12	12	0	0
24	12	12	0	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	3	1190	2	30	No	No	No	No	No	No	No	No	No	No
2	3	1142	2	29	No	No	No	No	No	No	No	No	No	No
3	3	1119	2	28	No	No	No	No	No	No	No	No	No	No
4	3	952	2	24	No	No	No	No	No	No	No	No	No	No
5	3	904	2	23	No	No	No	No	No	No	No	No	No	No
6	3	809	2	20	No	No	No	No	No	No	No	No	No	No
7	3	750	2	19	No	No	No	No	No	No	No	No	No	No
8	3	714	2	18	No	No	No	No	No	No	No	No	No	No
9	3	571	2	15	No	No	No	No	No	No	No	No	No	No
10	3	536	2	13	No	No	No	No	No	No	No	No	No	No
11	3	536	2	13	No	No	No	No	No	No	No	No	No	No
12	3	512	2	13	No	No	No	No	No	No	No	No	No	No
13	3	464	2	12	No	No	No	No	No	No	No	No	No	No
14	3	428	2	10	No	No	No	No	No	No	No	No	No	No
15	3	428	2	10	No	No	No	No	No	No	No	No	No	No
16	3	417	2	10	No	No	No	No	No	No	No	No	No	No
17	3	238	2	6	No	No	No	No	No	No	No	No	No	No
18	3	131	2	3	No	No	No	No	No	No	No	No	No	No
19	3	119	2	3	No	No	No	No	No	No	No	No	No	No
20	3	48	2	1	No	No	No	No	No	No	No	No	No	No
21	3	36	2	1	No	No	No	No	No	No	No	No	No	No
22	3	36	2	1	No	No	No	No	No	No	No	No	No	No
23	3	24	2	0	No	No	No	No	No	No	No	No	No	No
24	3	24	2	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	S	NW
Total Stopped Delay Per Vehicle on Minor Approach (s)	27.8	31.9
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:05	0:09
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	12	18
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	1220	1220
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Yes	Yes
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	

Signal Warrants Report For Intersection 17: Matthews Rd @ Palomar Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	Yes
#2	Four Hour Vehicular Volume	Yes
#3	Peak Hour	Yes

Intersection Warrants Parameters

Major Approaches	SE, NW
Minor Approaches	N
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	SE	NW	N
1	437	608	359
2	420	584	345
3	411	572	337
4	350	486	287
5	332	462	273
6	297	413	244
7	275	383	226
8	262	365	215
9	210	292	172
10	197	274	162
11	197	274	162
12	188	261	154
13	170	237	140
14	157	219	129
15	157	219	129
16	153	213	126
17	87	122	72
18	48	67	39
19	44	61	36
20	17	24	14
21	13	18	11
22	13	18	11
23	9	12	7
24	9	12	7

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	1045	2	359	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	2	1004	2	345	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	2	983	2	337	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	2	836	2	287	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
5	2	794	2	273	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
6	2	710	2	244	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No
7	2	658	2	226	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No
8	2	627	2	215	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes	No
9	2	502	2	172	No	Yes	Yes	Yes	No	No	No	No	No	No
10	2	471	2	162	No	No	Yes	Yes	No	No	No	No	No	No
11	2	471	2	162	No	No	Yes	Yes	No	No	No	No	No	No
12	2	449	2	154	No	No	Yes	Yes	No	No	No	No	No	No
13	2	407	2	140	No	No	No	Yes	No	No	No	No	No	No
14	2	376	2	129	No	No	No	Yes	No	No	No	No	No	No
15	2	376	2	129	No	No	No	Yes	No	No	No	No	No	No
16	2	366	2	126	No	No	No	Yes	No	No	No	No	No	No
17	2	209	2	72	No	No	No	No	No	No	No	No	No	No
18	2	115	2	39	No	No	No	No	No	No	No	No	No	No
19	2	105	2	36	No	No	No	No	No	No	No	No	No	No
20	2	41	2	14	No	No	No	No	No	No	No	No	No	No
21	2	31	2	11	No	No	No	No	No	No	No	No	No	No
22	2	31	2	11	No	No	No	No	No	No	No	No	No	No
23	2	21	2	7	No	No	No	No	No	No	No	No	No	No
24	2	21	2	7	No	No	No	No	No	No	No	No	No	No
Hours Met					8	9	12	16	3	5	7	8	8	5

Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	27.8
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	2:46
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	359
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	1404
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 18: McLaughlin Rd @ Murrieta Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E, W
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	S	N	E	W
1	395	289	18	15
2	379	277	17	14
3	371	272	17	14
4	316	231	14	12
5	300	220	14	11
6	269	197	12	10
7	249	182	11	9
8	237	173	11	9
9	190	139	9	7
10	178	130	8	7
11	178	130	8	7
12	170	124	8	6
13	154	113	7	6
14	142	104	6	5
15	142	104	6	5
16	138	101	6	5
17	79	58	4	3
18	43	32	2	2
19	40	29	2	2
20	16	12	1	1
21	12	9	1	0
22	12	9	1	0
23	8	6	0	0
24	8	6	0	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	4	684	2	33	No	No	No	No	No	No	No	No	No	No
2	4	656	2	31	No	No	No	No	No	No	No	No	No	No
3	4	643	2	31	No	No	No	No	No	No	No	No	No	No
4	4	547	2	26	No	No	No	No	No	No	No	No	No	No
5	4	520	2	25	No	No	No	No	No	No	No	No	No	No
6	4	466	2	22	No	No	No	No	No	No	No	No	No	No
7	4	431	2	20	No	No	No	No	No	No	No	No	No	No
8	4	410	2	20	No	No	No	No	No	No	No	No	No	No
9	4	329	2	16	No	No	No	No	No	No	No	No	No	No
10	4	308	2	15	No	No	No	No	No	No	No	No	No	No
11	4	308	2	15	No	No	No	No	No	No	No	No	No	No
12	4	294	2	14	No	No	No	No	No	No	No	No	No	No
13	4	267	2	13	No	No	No	No	No	No	No	No	No	No
14	4	246	2	11	No	No	No	No	No	No	No	No	No	No
15	4	246	2	11	No	No	No	No	No	No	No	No	No	No
16	4	239	2	11	No	No	No	No	No	No	No	No	No	No
17	4	137	2	7	No	No	No	No	No	No	No	No	No	No
18	4	75	2	4	No	No	No	No	No	No	No	No	No	No
19	4	69	2	4	No	No	No	No	No	No	No	No	No	No
20	4	28	2	2	No	No	No	No	No	No	No	No	No	No
21	4	21	2	1	No	No	No	No	No	No	No	No	No	No
22	4	21	2	1	No	No	No	No	No	No	No	No	No	No
23	4	14	2	0	No	No	No	No	No	No	No	No	No	No
24	4	14	2	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	12	16.3
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:03	0:04
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	18	15
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	717	717
Number of Approaches on Intersection	4	4
Total Volume Condition Met	No	No
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	

Signal Warrants Report For Intersection 19: McLaughlin Rd @ Encanto Dr

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	E
1	288	242	67
2	276	232	64
3	271	227	63
4	230	194	54
5	219	184	51
6	196	165	46
7	181	152	42
8	173	145	40
9	138	116	32
10	130	109	30
11	130	109	30
12	124	104	29
13	112	94	26
14	104	87	24
15	104	87	24
16	101	85	23
17	58	48	13
18	32	27	7
19	29	24	7
20	12	10	3
21	9	7	2
22	9	7	2
23	6	5	1
24	6	5	1

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	530	1	67	No	No	No	No	No	No	No	Yes	No	No
2	2	508	1	64	No	No	No	No	No	No	No	Yes	No	No
3	2	498	1	63	No	No	No	No	No	No	No	No	No	No
4	2	424	1	54	No	No	No	No	No	No	No	No	No	No
5	2	403	1	51	No	No	No	No	No	No	No	No	No	No
6	2	361	1	46	No	No	No	No	No	No	No	No	No	No
7	2	333	1	42	No	No	No	No	No	No	No	No	No	No
8	2	318	1	40	No	No	No	No	No	No	No	No	No	No
9	2	254	1	32	No	No	No	No	No	No	No	No	No	No
10	2	239	1	30	No	No	No	No	No	No	No	No	No	No
11	2	239	1	30	No	No	No	No	No	No	No	No	No	No
12	2	228	1	29	No	No	No	No	No	No	No	No	No	No
13	2	206	1	26	No	No	No	No	No	No	No	No	No	No
14	2	191	1	24	No	No	No	No	No	No	No	No	No	No
15	2	191	1	24	No	No	No	No	No	No	No	No	No	No
16	2	186	1	23	No	No	No	No	No	No	No	No	No	No
17	2	106	1	13	No	No	No	No	No	No	No	No	No	No
18	2	59	1	7	No	No	No	No	No	No	No	No	No	No
19	2	53	1	7	No	No	No	No	No	No	No	No	No	No
20	2	22	1	3	No	No	No	No	No	No	No	No	No	No
21	2	16	1	2	No	No	No	No	No	No	No	No	No	No
22	2	16	1	2	No	No	No	No	No	No	No	No	No	No
23	2	11	1	1	No	No	No	No	No	No	No	No	No	No
24	2	11	1	1	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	2	0	0

Warrant 3 Condition A

Orientation	E
Total Stopped Delay Per Vehicle on Minor Approach (s)	12
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:13
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	67
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	597
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 20: McLaughlin Rd @ Trumble Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E, W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	S	N	E	W
1	41	11	15	107
2	39	11	14	103
3	39	10	14	101
4	33	9	12	86
5	31	8	11	81
6	28	7	10	73
7	26	7	9	67
8	25	7	9	64
9	20	5	7	51
10	18	5	7	48
11	18	5	7	48
12	18	5	6	46
13	16	4	6	42
14	15	4	5	39
15	15	4	5	39
16	14	4	5	37
17	8	2	3	21
18	5	1	2	12
19	4	1	2	11
20	2	0	1	4
21	1	0	0	3
22	1	0	0	3
23	1	0	0	2
24	1	0	0	2

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	52	2	122	No	No	No	No	No	No	No	No	No	No
2	2	50	2	117	No	No	No	No	No	No	No	No	No	No
3	2	49	2	115	No	No	No	No	No	No	No	No	No	No
4	2	42	2	98	No	No	No	No	No	No	No	No	No	No
5	2	39	2	92	No	No	No	No	No	No	No	No	No	No
6	2	35	2	83	No	No	No	No	No	No	No	No	No	No
7	2	33	2	76	No	No	No	No	No	No	No	No	No	No
8	2	32	2	73	No	No	No	No	No	No	No	No	No	No
9	2	25	2	58	No	No	No	No	No	No	No	No	No	No
10	2	23	2	55	No	No	No	No	No	No	No	No	No	No
11	2	23	2	55	No	No	No	No	No	No	No	No	No	No
12	2	23	2	52	No	No	No	No	No	No	No	No	No	No
13	2	20	2	48	No	No	No	No	No	No	No	No	No	No
14	2	19	2	44	No	No	No	No	No	No	No	No	No	No
15	2	19	2	44	No	No	No	No	No	No	No	No	No	No
16	2	18	2	42	No	No	No	No	No	No	No	No	No	No
17	2	10	2	24	No	No	No	No	No	No	No	No	No	No
18	2	6	2	14	No	No	No	No	No	No	No	No	No	No
19	2	5	2	13	No	No	No	No	No	No	No	No	No	No
20	2	2	2	5	No	No	No	No	No	No	No	No	No	No
21	2	1	2	3	No	No	No	No	No	No	No	No	No	No
22	2	1	2	3	No	No	No	No	No	No	No	No	No	No
23	2	1	2	2	No	No	No	No	No	No	No	No	No	No
24	2	1	2	2	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	7.2	7.6
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:01	0:13
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	15	107
High Minor Volume Condition Met	No	Yes
Total Entering Volume on All Approaches During Same Hour	174	174
Number of Approaches on Intersection	4	4
Total Volume Condition Met	No	No
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	

Signal Warrants Report For Intersection 21: McLaughlin Rd @ Sherman Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E, W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	S	N	E	W
1	7	15	0	68
2	7	14	0	65
3	7	14	0	64
4	6	12	0	54
5	5	11	0	52
6	5	10	0	46
7	4	9	0	43
8	4	9	0	41
9	3	7	0	33
10	3	7	0	31
11	3	7	0	31
12	3	6	0	29
13	3	6	0	27
14	3	5	0	24
15	3	5	0	24
16	2	5	0	24
17	1	3	0	14
18	1	2	0	7
19	1	2	0	7
20	0	1	0	3
21	0	0	0	2
22	0	0	0	2
23	0	0	0	1
24	0	0	0	1

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	22	2	68	No	No	No	No	No	No	No	No	No	No
2	2	21	2	65	No	No	No	No	No	No	No	No	No	No
3	2	21	2	64	No	No	No	No	No	No	No	No	No	No
4	2	18	2	54	No	No	No	No	No	No	No	No	No	No
5	2	16	2	52	No	No	No	No	No	No	No	No	No	No
6	2	15	2	46	No	No	No	No	No	No	No	No	No	No
7	2	13	2	43	No	No	No	No	No	No	No	No	No	No
8	2	13	2	41	No	No	No	No	No	No	No	No	No	No
9	2	10	2	33	No	No	No	No	No	No	No	No	No	No
10	2	10	2	31	No	No	No	No	No	No	No	No	No	No
11	2	10	2	31	No	No	No	No	No	No	No	No	No	No
12	2	9	2	29	No	No	No	No	No	No	No	No	No	No
13	2	9	2	27	No	No	No	No	No	No	No	No	No	No
14	2	8	2	24	No	No	No	No	No	No	No	No	No	No
15	2	8	2	24	No	No	No	No	No	No	No	No	No	No
16	2	7	2	24	No	No	No	No	No	No	No	No	No	No
17	2	4	2	14	No	No	No	No	No	No	No	No	No	No
18	2	3	2	7	No	No	No	No	No	No	No	No	No	No
19	2	3	2	7	No	No	No	No	No	No	No	No	No	No
20	2	1	2	3	No	No	No	No	No	No	No	No	No	No
21	2	0	2	2	No	No	No	No	No	No	No	No	No	No
22	2	0	2	2	No	No	No	No	No	No	No	No	No	No
23	2	0	2	1	No	No	No	No	No	No	No	No	No	No
24	2	0	2	1	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	8.7	8.9
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:00	0:10
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	0	68
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	90	90
Number of Approaches on Intersection	4	4
Total Volume Condition Met	No	No
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	

Signal Warrants Report For Intersection 22: Rouse Rd @ Murrieta Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E, W
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	S	N	E	W
1	325	301	87	42
2	312	289	84	40
3	306	283	82	39
4	260	241	70	34
5	247	229	66	32
6	221	205	59	29
7	205	190	55	26
8	195	181	52	25
9	156	144	42	20
10	146	135	39	19
11	146	135	39	19
12	140	129	37	18
13	127	117	34	16
14	117	108	31	15
15	117	108	31	15
16	114	105	30	15
17	65	60	17	8
18	36	33	10	5
19	33	30	9	4
20	13	12	3	2
21	10	9	3	1
22	10	9	3	1
23	7	6	2	1
24	7	6	2	1

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	6	626	6	129	No	No	No	No	No	No	No	Yes	No	No
2	6	601	6	124	No	No	No	No	No	No	No	Yes	No	No
3	6	589	6	121	No	No	No	No	No	No	No	Yes	No	No
4	6	501	6	104	No	No	No	No	No	No	No	No	No	No
5	6	476	6	98	No	No	No	No	No	No	No	No	No	No
6	6	426	6	88	No	No	No	No	No	No	No	No	No	No
7	6	395	6	81	No	No	No	No	No	No	No	No	No	No
8	6	376	6	77	No	No	No	No	No	No	No	No	No	No
9	6	300	6	62	No	No	No	No	No	No	No	No	No	No
10	6	281	6	58	No	No	No	No	No	No	No	No	No	No
11	6	281	6	58	No	No	No	No	No	No	No	No	No	No
12	6	269	6	55	No	No	No	No	No	No	No	No	No	No
13	6	244	6	50	No	No	No	No	No	No	No	No	No	No
14	6	225	6	46	No	No	No	No	No	No	No	No	No	No
15	6	225	6	46	No	No	No	No	No	No	No	No	No	No
16	6	219	6	45	No	No	No	No	No	No	No	No	No	No
17	6	125	6	25	No	No	No	No	No	No	No	No	No	No
18	6	69	6	15	No	No	No	No	No	No	No	No	No	No
19	6	63	6	13	No	No	No	No	No	No	No	No	No	No
20	6	25	6	5	No	No	No	No	No	No	No	No	No	No
21	6	19	6	4	No	No	No	No	No	No	No	No	No	No
22	6	19	6	4	No	No	No	No	No	No	No	No	No	No
23	6	13	6	3	No	No	No	No	No	No	No	No	No	No
24	6	13	6	3	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	3	0	0

Warrant 3 Condition A

Orientation	E	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	11.8	16
Number of Lanes on Minor Street Approach	3	3
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:17	0:11
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	87	42
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	755	755
Number of Approaches on Intersection	4	4
Total Volume Condition Met	No	No
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	

Signal Warrants Report For Intersection 23: Rouse Rd @ Encanto Dr

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	E
1	340	202	135
2	326	194	130
3	320	190	127
4	272	162	108
5	258	154	103
6	231	137	92
7	214	127	85
8	204	121	81
9	163	97	65
10	153	91	61
11	153	91	61
12	146	87	58
13	133	79	53
14	122	73	49
15	122	73	49
16	119	71	47
17	68	40	27
18	37	22	15
19	34	20	14
20	14	8	5
21	10	6	4
22	10	6	4
23	7	4	3
24	7	4	3

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	542	1	135	No	Yes	Yes	Yes	No	No	No	Yes	No	No
2	2	520	1	130	No	Yes	Yes	Yes	No	No	No	Yes	No	No
3	2	510	1	127	No	Yes	Yes	Yes	No	No	No	Yes	No	No
4	2	434	1	108	No	No	Yes	Yes	No	No	No	No	No	No
5	2	412	1	103	No	No	No	Yes	No	No	No	No	No	No
6	2	368	1	92	No	No	No	Yes	No	No	No	No	No	No
7	2	341	1	85	No	No	No	Yes	No	No	No	No	No	No
8	2	325	1	81	No	No	No	No	No	No	No	No	No	No
9	2	260	1	65	No	No	No	No	No	No	No	No	No	No
10	2	244	1	61	No	No	No	No	No	No	No	No	No	No
11	2	244	1	61	No	No	No	No	No	No	No	No	No	No
12	2	233	1	58	No	No	No	No	No	No	No	No	No	No
13	2	212	1	53	No	No	No	No	No	No	No	No	No	No
14	2	195	1	49	No	No	No	No	No	No	No	No	No	No
15	2	195	1	49	No	No	No	No	No	No	No	No	No	No
16	2	190	1	47	No	No	No	No	No	No	No	No	No	No
17	2	108	1	27	No	No	No	No	No	No	No	No	No	No
18	2	59	1	15	No	No	No	No	No	No	No	No	No	No
19	2	54	1	14	No	No	No	No	No	No	No	No	No	No
20	2	22	1	5	No	No	No	No	No	No	No	No	No	No
21	2	16	1	4	No	No	No	No	No	No	No	No	No	No
22	2	16	1	4	No	No	No	No	No	No	No	No	No	No
23	2	11	1	3	No	No	No	No	No	No	No	No	No	No
24	2	11	1	3	No	No	No	No	No	No	No	No	No	No
Hours Met					0	3	4	7	0	0	0	3	0	0

Warrant 3 Condition A

Orientation	E
Total Stopped Delay Per Vehicle on Minor Approach (s)	14.3
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:32
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	135
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	677
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 28: Sherman Rd @ Project dwy 1

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	E
1	122	632	72
2	117	607	69
3	115	594	68
4	98	506	58
5	93	480	55
6	83	430	49
7	77	398	45
8	73	379	43
9	59	303	35
10	55	284	32
11	55	284	32
12	52	272	31
13	48	246	28
14	44	228	26
15	44	228	26
16	43	221	25
17	24	126	14
18	13	70	8
19	12	63	7
20	5	25	3
21	4	19	2
22	4	19	2
23	2	13	1
24	2	13	1

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	3	754	1	72	No	No	No	No	No	Yes	Yes	Yes	No	No
2	3	724	1	69	No	No	No	No	No	Yes	Yes	Yes	No	No
3	3	709	1	68	No	No	No	No	No	No	Yes	Yes	No	No
4	3	604	1	58	No	No	No	No	No	No	No	Yes	No	No
5	3	573	1	55	No	No	No	No	No	No	No	Yes	No	No
6	3	513	1	49	No	No	No	No	No	No	No	Yes	No	No
7	3	475	1	45	No	No	No	No	No	No	No	No	No	No
8	3	452	1	43	No	No	No	No	No	No	No	No	No	No
9	3	362	1	35	No	No	No	No	No	No	No	No	No	No
10	3	339	1	32	No	No	No	No	No	No	No	No	No	No
11	3	339	1	32	No	No	No	No	No	No	No	No	No	No
12	3	324	1	31	No	No	No	No	No	No	No	No	No	No
13	3	294	1	28	No	No	No	No	No	No	No	No	No	No
14	3	272	1	26	No	No	No	No	No	No	No	No	No	No
15	3	272	1	26	No	No	No	No	No	No	No	No	No	No
16	3	264	1	25	No	No	No	No	No	No	No	No	No	No
17	3	150	1	14	No	No	No	No	No	No	No	No	No	No
18	3	83	1	8	No	No	No	No	No	No	No	No	No	No
19	3	75	1	7	No	No	No	No	No	No	No	No	No	No
20	3	30	1	3	No	No	No	No	No	No	No	No	No	No
21	3	23	1	2	No	No	No	No	No	No	No	No	No	No
22	3	23	1	2	No	No	No	No	No	No	No	No	No	No
23	3	15	1	1	No	No	No	No	No	No	No	No	No	No
24	3	15	1	1	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	2	3	6	0	0

Warrant 3 Condition A

Orientation	E
Total Stopped Delay Per Vehicle on Minor Approach (s)	10.9
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:13
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	72
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	826
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 29: Sherman Rd @ Project dwy 2

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	W
1	122	350	2
2	117	336	2
3	115	329	2
4	98	280	2
5	93	266	2
6	83	238	1
7	77	221	1
8	73	210	1
9	59	168	1
10	55	158	1
11	55	158	1
12	52	151	1
13	48	137	1
14	44	126	1
15	44	126	1
16	43	122	1
17	24	70	0
18	13	39	0
19	12	35	0
20	5	14	0
21	4	11	0
22	4	11	0
23	2	7	0
24	2	7	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	472	1	2	No	No	No	No	No	No	No	No	No	No
2	2	453	1	2	No	No	No	No	No	No	No	No	No	No
3	2	444	1	2	No	No	No	No	No	No	No	No	No	No
4	2	378	1	2	No	No	No	No	No	No	No	No	No	No
5	2	359	1	2	No	No	No	No	No	No	No	No	No	No
6	2	321	1	1	No	No	No	No	No	No	No	No	No	No
7	2	298	1	1	No	No	No	No	No	No	No	No	No	No
8	2	283	1	1	No	No	No	No	No	No	No	No	No	No
9	2	227	1	1	No	No	No	No	No	No	No	No	No	No
10	2	213	1	1	No	No	No	No	No	No	No	No	No	No
11	2	213	1	1	No	No	No	No	No	No	No	No	No	No
12	2	203	1	1	No	No	No	No	No	No	No	No	No	No
13	2	185	1	1	No	No	No	No	No	No	No	No	No	No
14	2	170	1	1	No	No	No	No	No	No	No	No	No	No
15	2	170	1	1	No	No	No	No	No	No	No	No	No	No
16	2	165	1	1	No	No	No	No	No	No	No	No	No	No
17	2	94	1	0	No	No	No	No	No	No	No	No	No	No
18	2	52	1	0	No	No	No	No	No	No	No	No	No	No
19	2	47	1	0	No	No	No	No	No	No	No	No	No	No
20	2	19	1	0	No	No	No	No	No	No	No	No	No	No
21	2	15	1	0	No	No	No	No	No	No	No	No	No	No
22	2	15	1	0	No	No	No	No	No	No	No	No	No	No
23	2	9	1	0	No	No	No	No	No	No	No	No	No	No
24	2	9	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	11.8
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:00
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	2
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	474
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 30: Sherman Rd @ Project dwy 3

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	N, S
Minor Approaches	E, W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	N	S	E	W
1	342	87	76	0
2	328	84	73	0
3	321	82	71	0
4	274	70	61	0
5	260	66	58	0
6	233	59	52	0
7	215	55	48	0
8	205	52	46	0
9	164	42	36	0
10	154	39	34	0
11	154	39	34	0
12	147	37	33	0
13	133	34	30	0
14	123	31	27	0
15	123	31	27	0
16	120	30	27	0
17	68	17	15	0
18	38	10	8	0
19	34	9	8	0
20	14	3	3	0
21	10	3	2	0
22	10	3	2	0
23	7	2	2	0
24	7	2	2	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	3	429	2	76	No	No	No	No	No	No	No	No	No	No
2	3	412	2	73	No	No	No	No	No	No	No	No	No	No
3	3	403	2	71	No	No	No	No	No	No	No	No	No	No
4	3	344	2	61	No	No	No	No	No	No	No	No	No	No
5	3	326	2	58	No	No	No	No	No	No	No	No	No	No
6	3	292	2	52	No	No	No	No	No	No	No	No	No	No
7	3	270	2	48	No	No	No	No	No	No	No	No	No	No
8	3	257	2	46	No	No	No	No	No	No	No	No	No	No
9	3	206	2	36	No	No	No	No	No	No	No	No	No	No
10	3	193	2	34	No	No	No	No	No	No	No	No	No	No
11	3	193	2	34	No	No	No	No	No	No	No	No	No	No
12	3	184	2	33	No	No	No	No	No	No	No	No	No	No
13	3	167	2	30	No	No	No	No	No	No	No	No	No	No
14	3	154	2	27	No	No	No	No	No	No	No	No	No	No
15	3	154	2	27	No	No	No	No	No	No	No	No	No	No
16	3	150	2	27	No	No	No	No	No	No	No	No	No	No
17	3	85	2	15	No	No	No	No	No	No	No	No	No	No
18	3	48	2	8	No	No	No	No	No	No	No	No	No	No
19	3	43	2	8	No	No	No	No	No	No	No	No	No	No
20	3	17	2	3	No	No	No	No	No	No	No	No	No	No
21	3	13	2	2	No	No	No	No	No	No	No	No	No	No
22	3	13	2	2	No	No	No	No	No	No	No	No	No	No
23	3	9	2	2	No	No	No	No	No	No	No	No	No	No
24	3	9	2	2	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	10.1	15.8
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:12	0:00
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	76	0
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	505	505
Number of Approaches on Intersection	4	4
Total Volume Condition Met	No	No
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	

Signal Warrants Report For Intersection 31: Trumble Rd @ Project dwy 4

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	E
1	14	7	2
2	13	7	2
3	13	7	2
4	11	6	2
5	11	5	2
6	10	5	1
7	9	4	1
8	8	4	1
9	7	3	1
10	6	3	1
11	6	3	1
12	6	3	1
13	5	3	1
14	5	3	1
15	5	3	1
16	5	2	1
17	3	1	0
18	2	1	0
19	1	1	0
20	1	0	0
21	0	0	0
22	0	0	0
23	0	0	0
24	0	0	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	21	1	2	No	No	No	No	No	No	No	No	No	No
2	2	20	1	2	No	No	No	No	No	No	No	No	No	No
3	2	20	1	2	No	No	No	No	No	No	No	No	No	No
4	2	17	1	2	No	No	No	No	No	No	No	No	No	No
5	2	16	1	2	No	No	No	No	No	No	No	No	No	No
6	2	15	1	1	No	No	No	No	No	No	No	No	No	No
7	2	13	1	1	No	No	No	No	No	No	No	No	No	No
8	2	12	1	1	No	No	No	No	No	No	No	No	No	No
9	2	10	1	1	No	No	No	No	No	No	No	No	No	No
10	2	9	1	1	No	No	No	No	No	No	No	No	No	No
11	2	9	1	1	No	No	No	No	No	No	No	No	No	No
12	2	9	1	1	No	No	No	No	No	No	No	No	No	No
13	2	8	1	1	No	No	No	No	No	No	No	No	No	No
14	2	8	1	1	No	No	No	No	No	No	No	No	No	No
15	2	8	1	1	No	No	No	No	No	No	No	No	No	No
16	2	7	1	1	No	No	No	No	No	No	No	No	No	No
17	2	4	1	0	No	No	No	No	No	No	No	No	No	No
18	2	3	1	0	No	No	No	No	No	No	No	No	No	No
19	2	2	1	0	No	No	No	No	No	No	No	No	No	No
20	2	1	1	0	No	No	No	No	No	No	No	No	No	No
21	2	0	1	0	No	No	No	No	No	No	No	No	No	No
22	2	0	1	0	No	No	No	No	No	No	No	No	No	No
23	2	0	1	0	No	No	No	No	No	No	No	No	No	No
24	2	0	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E
Total Stopped Delay Per Vehicle on Minor Approach (s)	8.6
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:00
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	2
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	23
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 32: Trumble Rd @ Project dwy 5

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	E
1	23	9	2
2	22	9	2
3	22	8	2
4	18	7	2
5	17	7	2
6	16	6	1
7	14	6	1
8	14	5	1
9	11	4	1
10	10	4	1
11	10	4	1
12	10	4	1
13	9	4	1
14	8	3	1
15	8	3	1
16	8	3	1
17	5	2	0
18	3	1	0
19	2	1	0
20	1	0	0
21	1	0	0
22	1	0	0
23	0	0	0
24	0	0	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	32	1	2	No	No	No	No	No	No	No	No	No	No
2	2	31	1	2	No	No	No	No	No	No	No	No	No	No
3	2	30	1	2	No	No	No	No	No	No	No	No	No	No
4	2	25	1	2	No	No	No	No	No	No	No	No	No	No
5	2	24	1	2	No	No	No	No	No	No	No	No	No	No
6	2	22	1	1	No	No	No	No	No	No	No	No	No	No
7	2	20	1	1	No	No	No	No	No	No	No	No	No	No
8	2	19	1	1	No	No	No	No	No	No	No	No	No	No
9	2	15	1	1	No	No	No	No	No	No	No	No	No	No
10	2	14	1	1	No	No	No	No	No	No	No	No	No	No
11	2	14	1	1	No	No	No	No	No	No	No	No	No	No
12	2	14	1	1	No	No	No	No	No	No	No	No	No	No
13	2	13	1	1	No	No	No	No	No	No	No	No	No	No
14	2	11	1	1	No	No	No	No	No	No	No	No	No	No
15	2	11	1	1	No	No	No	No	No	No	No	No	No	No
16	2	11	1	1	No	No	No	No	No	No	No	No	No	No
17	2	7	1	0	No	No	No	No	No	No	No	No	No	No
18	2	4	1	0	No	No	No	No	No	No	No	No	No	No
19	2	3	1	0	No	No	No	No	No	No	No	No	No	No
20	2	1	1	0	No	No	No	No	No	No	No	No	No	No
21	2	1	1	0	No	No	No	No	No	No	No	No	No	No
22	2	1	1	0	No	No	No	No	No	No	No	No	No	No
23	2	0	1	0	No	No	No	No	No	No	No	No	No	No
24	2	0	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E
Total Stopped Delay Per Vehicle on Minor Approach (s)	8.7
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:00
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	2
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	34
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 33: Dawson Rd @ Project dwy 6

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	W
1	23	234	31
2	22	225	30
3	22	220	29
4	18	187	25
5	17	178	24
6	16	159	21
7	14	147	20
8	14	140	19
9	11	112	15
10	10	105	14
11	10	105	14
12	10	101	13
13	9	91	12
14	8	84	11
15	8	84	11
16	8	82	11
17	5	47	6
18	3	26	3
19	2	23	3
20	1	9	1
21	1	7	1
22	1	7	1
23	0	5	1
24	0	5	1

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	257	1	31	No	No	No	No	No	No	No	No	No	No
2	2	247	1	30	No	No	No	No	No	No	No	No	No	No
3	2	242	1	29	No	No	No	No	No	No	No	No	No	No
4	2	205	1	25	No	No	No	No	No	No	No	No	No	No
5	2	195	1	24	No	No	No	No	No	No	No	No	No	No
6	2	175	1	21	No	No	No	No	No	No	No	No	No	No
7	2	161	1	20	No	No	No	No	No	No	No	No	No	No
8	2	154	1	19	No	No	No	No	No	No	No	No	No	No
9	2	123	1	15	No	No	No	No	No	No	No	No	No	No
10	2	115	1	14	No	No	No	No	No	No	No	No	No	No
11	2	115	1	14	No	No	No	No	No	No	No	No	No	No
12	2	111	1	13	No	No	No	No	No	No	No	No	No	No
13	2	100	1	12	No	No	No	No	No	No	No	No	No	No
14	2	92	1	11	No	No	No	No	No	No	No	No	No	No
15	2	92	1	11	No	No	No	No	No	No	No	No	No	No
16	2	90	1	11	No	No	No	No	No	No	No	No	No	No
17	2	52	1	6	No	No	No	No	No	No	No	No	No	No
18	2	29	1	3	No	No	No	No	No	No	No	No	No	No
19	2	25	1	3	No	No	No	No	No	No	No	No	No	No
20	2	10	1	1	No	No	No	No	No	No	No	No	No	No
21	2	8	1	1	No	No	No	No	No	No	No	No	No	No
22	2	8	1	1	No	No	No	No	No	No	No	No	No	No
23	2	5	1	1	No	No	No	No	No	No	No	No	No	No
24	2	5	1	1	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	9.7
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:05
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	31
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	288
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 34: Dawson Rd @ Project dwy 7

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	N, S
Minor Approaches	W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	N	S	W
1	96	2	21
2	92	2	20
3	90	2	20
4	77	2	17
5	73	2	16
6	65	1	14
7	60	1	13
8	58	1	13
9	46	1	10
10	43	1	9
11	43	1	9
12	41	1	9
13	37	1	8
14	35	1	8
15	35	1	8
16	34	1	7
17	19	0	4
18	11	0	2
19	10	0	2
20	4	0	1
21	3	0	1
22	3	0	1
23	2	0	0
24	2	0	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	98	1	21	No	No	No	No	No	No	No	No	No	No
2	2	94	1	20	No	No	No	No	No	No	No	No	No	No
3	2	92	1	20	No	No	No	No	No	No	No	No	No	No
4	2	79	1	17	No	No	No	No	No	No	No	No	No	No
5	2	75	1	16	No	No	No	No	No	No	No	No	No	No
6	2	66	1	14	No	No	No	No	No	No	No	No	No	No
7	2	61	1	13	No	No	No	No	No	No	No	No	No	No
8	2	59	1	13	No	No	No	No	No	No	No	No	No	No
9	2	47	1	10	No	No	No	No	No	No	No	No	No	No
10	2	44	1	9	No	No	No	No	No	No	No	No	No	No
11	2	44	1	9	No	No	No	No	No	No	No	No	No	No
12	2	42	1	9	No	No	No	No	No	No	No	No	No	No
13	2	38	1	8	No	No	No	No	No	No	No	No	No	No
14	2	36	1	8	No	No	No	No	No	No	No	No	No	No
15	2	36	1	8	No	No	No	No	No	No	No	No	No	No
16	2	35	1	7	No	No	No	No	No	No	No	No	No	No
17	2	19	1	4	No	No	No	No	No	No	No	No	No	No
18	2	11	1	2	No	No	No	No	No	No	No	No	No	No
19	2	10	1	2	No	No	No	No	No	No	No	No	No	No
20	2	4	1	1	No	No	No	No	No	No	No	No	No	No
21	2	3	1	1	No	No	No	No	No	No	No	No	No	No
22	2	3	1	1	No	No	No	No	No	No	No	No	No	No
23	2	2	1	0	No	No	No	No	No	No	No	No	No	No
24	2	2	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	8.9
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:03
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	21
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	119
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 9: Ethanac Rd @ Encanto Dr

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	Yes
#2	Four Hour Vehicular Volume	Yes
#3	Peak Hour	Yes

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	E	W	S
1	1385	1282	217
2	1330	1231	208
3	1302	1205	204
4	1108	1026	174
5	1053	974	165
6	942	872	148
7	873	808	137
8	831	769	130
9	665	615	104
10	623	577	98
11	623	577	98
12	596	551	93
13	540	500	85
14	499	462	78
15	499	462	78
16	485	449	76
17	277	256	43
18	152	141	24
19	139	128	22
20	55	51	9
21	42	38	7
22	42	38	7
23	28	26	4
24	28	26	4

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	3	2667	1	217	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	3	2561	1	208	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	3	2507	1	204	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	3	2134	1	174	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5	3	2027	1	165	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6	3	1814	1	148	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7	3	1681	1	137	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8	3	1600	1	130	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
9	3	1280	1	104	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
10	3	1200	1	98	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
11	3	1200	1	98	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
12	3	1147	1	93	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
13	3	1040	1	85	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No
14	3	961	1	78	No	No	No	No	Yes	Yes	Yes	Yes	Yes	No
15	3	961	1	78	No	No	No	No	Yes	Yes	Yes	Yes	Yes	No
16	3	934	1	76	No	No	No	No	Yes	Yes	Yes	Yes	Yes	No
17	3	533	1	43	No	No	No	No	No	No	No	Yes	No	No
18	3	293	1	24	No	No	No	No	No	No	No	No	No	No
19	3	267	1	22	No	No	No	No	No	No	No	No	No	No
20	3	106	1	9	No	No	No	No	No	No	No	No	No	No
21	3	80	1	7	No	No	No	No	No	No	No	No	No	No
22	3	80	1	7	No	No	No	No	No	No	No	No	No	No
23	3	54	1	4	No	No	No	No	No	No	No	No	No	No
24	3	54	1	4	No	No	No	No	No	No	No	No	No	No
Hours Met					5	8	8	13	16	16	16	17	16	12

Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	3419.8
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	206:08
Delay Condition Met	Yes
Volume on Minor Street Approach During Same Hour	217
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	2884
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	Yes
Warrant Met for Intersection	Yes

Signal Warrants Report For Intersection 11: Ethanac Rd @ Sherman Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	Yes
#2	Four Hour Vehicular Volume	Yes
#3	Peak Hour	Yes

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S, N
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	E	W	S	N
1	737	1163	665	161
2	708	1116	638	155
3	693	1093	625	151
4	590	930	532	129
5	560	884	505	122
6	501	791	452	109
7	464	733	419	101
8	442	698	399	97
9	354	558	319	77
10	332	523	299	72
11	332	523	299	72
12	317	500	286	69
13	287	454	259	63
14	265	419	239	58
15	265	419	239	58
16	258	407	233	56
17	147	233	133	32
18	81	128	73	18
19	74	116	67	16
20	29	47	27	6
21	22	35	20	5
22	22	35	20	5
23	15	23	13	3
24	15	23	13	3

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	1900	2	826	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	2	1824	2	793	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	2	1786	2	776	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	2	1520	2	661	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5	2	1444	2	627	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6	2	1292	2	561	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7	2	1197	2	520	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8	2	1140	2	496	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
9	2	912	2	396	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
10	2	855	2	371	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
11	2	855	2	371	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
12	2	817	2	355	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
13	2	741	2	322	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
14	2	684	2	297	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes
15	2	684	2	297	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes
16	2	665	2	289	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes
17	2	380	2	165	No	No	No	Yes	No	No	No	No	No	No
18	2	209	2	91	No	No	No	No	No	No	No	No	No	No
19	2	190	2	83	No	No	No	No	No	No	No	No	No	No
20	2	76	2	33	No	No	No	No	No	No	No	No	No	No
21	2	57	2	25	No	No	No	No	No	No	No	No	No	No
22	2	57	2	25	No	No	No	No	No	No	No	No	No	No
23	2	38	2	16	No	No	No	No	No	No	No	No	No	No
24	2	38	2	16	No	No	No	No	No	No	No	No	No	No
Hours Met					16	16	16	17	9	13	16	16	16	16

Warrant 3 Condition A

Orientation	S	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	10000	10000
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	1847:13	447:13
Delay Condition Met	Yes	Yes
Volume on Minor Street Approach During Same Hour	665	161
High Minor Volume Condition Met	Yes	Yes
Total Entering Volume on All Approaches During Same Hour	2726	2726
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Yes	Yes
Warrant Met for Approach	Yes	Yes
Warrant Met for Intersection	Yes	

Signal Warrants Report For Intersection 12: Ethanac Rd @ Dawson Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	Yes
#2	Four Hour Vehicular Volume	Yes
#3	Peak Hour	Yes

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	E	W	S
1	552	789	239
2	530	757	229
3	519	742	225
4	442	631	191
5	420	600	182
6	375	537	163
7	348	497	151
8	331	473	143
9	265	379	115
10	248	355	108
11	248	355	108
12	237	339	103
13	215	308	93
14	199	284	86
15	199	284	86
16	193	276	84
17	110	158	48
18	61	87	26
19	55	79	24
20	22	32	10
21	17	24	7
22	17	24	7
23	11	16	5
24	11	16	5

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	1341	1	239	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	2	1287	1	229	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	2	1261	1	225	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	2	1073	1	191	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5	2	1020	1	182	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6	2	912	1	163	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7	2	845	1	151	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
8	2	804	1	143	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
9	2	644	1	115	No	No	Yes	Yes	No	No	Yes	Yes	No	No
10	2	603	1	108	No	No	Yes	Yes	No	No	No	Yes	No	No
11	2	603	1	108	No	No	Yes	Yes	No	No	No	Yes	No	No
12	2	576	1	103	No	No	No	Yes	No	No	No	Yes	No	No
13	2	523	1	93	No	No	No	Yes	No	No	No	Yes	No	No
14	2	483	1	86	No	No	No	Yes	No	No	No	No	No	No
15	2	483	1	86	No	No	No	Yes	No	No	No	No	No	No
16	2	469	1	84	No	No	No	Yes	No	No	No	No	No	No
17	2	268	1	48	No	No	No	No	No	No	No	No	No	No
18	2	148	1	26	No	No	No	No	No	No	No	No	No	No
19	2	134	1	24	No	No	No	No	No	No	No	No	No	No
20	2	54	1	10	No	No	No	No	No	No	No	No	No	No
21	2	41	1	7	No	No	No	No	No	No	No	No	No	No
22	2	41	1	7	No	No	No	No	No	No	No	No	No	No
23	2	27	1	5	No	No	No	No	No	No	No	No	No	No
24	2	27	1	5	No	No	No	No	No	No	No	No	No	No
Hours Met					7	8	11	16	6	8	9	13	8	6

Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	298.5
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	19:49
Delay Condition Met	Yes
Volume on Minor Street Approach During Same Hour	239
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	1580
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	Yes
Warrant Met for Intersection	Yes

Signal Warrants Report For Intersection 13: Ethanac Rd @ Antelope Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S, NW
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	E	W	S	NW
1	522	649	53	16
2	501	623	51	15
3	491	610	50	15
4	418	519	42	13
5	397	493	40	12
6	355	441	36	11
7	329	409	33	10
8	313	389	32	10
9	251	312	25	8
10	235	292	24	7
11	235	292	24	7
12	224	279	23	7
13	204	253	21	6
14	188	234	19	6
15	188	234	19	6
16	183	227	19	6
17	104	130	11	3
18	57	71	6	2
19	52	65	5	2
20	21	26	2	1
21	16	19	2	0
22	16	19	2	0
23	10	13	1	0
24	10	13	1	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	3	1171	2	69	No	No	No	No	No	No	Yes	Yes	No	No
2	3	1124	2	66	No	No	No	No	No	No	No	Yes	No	No
3	3	1101	2	65	No	No	No	No	No	No	No	Yes	No	No
4	3	937	2	55	No	No	No	No	No	No	No	Yes	No	No
5	3	890	2	52	No	No	No	No	No	No	No	No	No	No
6	3	796	2	47	No	No	No	No	No	No	No	No	No	No
7	3	738	2	43	No	No	No	No	No	No	No	No	No	No
8	3	702	2	42	No	No	No	No	No	No	No	No	No	No
9	3	563	2	33	No	No	No	No	No	No	No	No	No	No
10	3	527	2	31	No	No	No	No	No	No	No	No	No	No
11	3	527	2	31	No	No	No	No	No	No	No	No	No	No
12	3	503	2	30	No	No	No	No	No	No	No	No	No	No
13	3	457	2	27	No	No	No	No	No	No	No	No	No	No
14	3	422	2	25	No	No	No	No	No	No	No	No	No	No
15	3	422	2	25	No	No	No	No	No	No	No	No	No	No
16	3	410	2	25	No	No	No	No	No	No	No	No	No	No
17	3	234	2	14	No	No	No	No	No	No	No	No	No	No
18	3	128	2	8	No	No	No	No	No	No	No	No	No	No
19	3	117	2	7	No	No	No	No	No	No	No	No	No	No
20	3	47	2	3	No	No	No	No	No	No	No	No	No	No
21	3	35	2	2	No	No	No	No	No	No	No	No	No	No
22	3	35	2	2	No	No	No	No	No	No	No	No	No	No
23	3	23	2	1	No	No	No	No	No	No	No	No	No	No
24	3	23	2	1	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	1	4	0	0

Warrant 3 Condition A

Orientation	S	NW
Total Stopped Delay Per Vehicle on Minor Approach (s)	30.3	33
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:26	0:08
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	53	16
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	1240	1240
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Yes	Yes
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	

Signal Warrants Report For Intersection 17: Matthews Rd @ Palomar Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	Yes
#2	Four Hour Vehicular Volume	Yes
#3	Peak Hour	Yes

Intersection Warrants Parameters

Major Approaches	SE, NW
Minor Approaches	N
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	SE	NW	N
1	329	674	307
2	316	647	295
3	309	634	289
4	263	539	246
5	250	512	233
6	224	458	209
7	207	425	193
8	197	404	184
9	158	324	147
10	148	303	138
11	148	303	138
12	141	290	132
13	128	263	120
14	118	243	111
15	118	243	111
16	115	236	107
17	66	135	61
18	36	74	34
19	33	67	31
20	13	27	12
21	10	20	9
22	10	20	9
23	7	13	6
24	7	13	6

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	1003	2	307	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	2	963	2	295	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	2	943	2	289	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	2	802	2	246	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
5	2	762	2	233	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
6	2	682	2	209	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No
7	2	632	2	193	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No
8	2	601	2	184	No	Yes	Yes	Yes	No	No	No	Yes	Yes	No
9	2	482	2	147	No	No	Yes	Yes	No	No	No	No	No	No
10	2	451	2	138	No	No	No	Yes	No	No	No	No	No	No
11	2	451	2	138	No	No	No	Yes	No	No	No	No	No	No
12	2	431	2	132	No	No	No	Yes	No	No	No	No	No	No
13	2	391	2	120	No	No	No	Yes	No	No	No	No	No	No
14	2	361	2	111	No	No	No	No	No	No	No	No	No	No
15	2	361	2	111	No	No	No	No	No	No	No	No	No	No
16	2	351	2	107	No	No	No	No	No	No	No	No	No	No
17	2	201	2	61	No	No	No	No	No	No	No	No	No	No
18	2	110	2	34	No	No	No	No	No	No	No	No	No	No
19	2	100	2	31	No	No	No	No	No	No	No	No	No	No
20	2	40	2	12	No	No	No	No	No	No	No	No	No	No
21	2	30	2	9	No	No	No	No	No	No	No	No	No	No
22	2	30	2	9	No	No	No	No	No	No	No	No	No	No
23	2	20	2	6	No	No	No	No	No	No	No	No	No	No
24	2	20	2	6	No	No	No	No	No	No	No	No	No	No
Hours Met					6	8	9	13	3	5	7	8	8	4

Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	21.2
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	1:48
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	307
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	1310
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 18: McLaughlin Rd @ Murrieta Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E, W
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	S	N	E	W
1	471	638	17	18
2	452	612	16	17
3	443	600	16	17
4	377	510	14	14
5	358	485	13	14
6	320	434	12	12
7	297	402	11	11
8	283	383	10	11
9	226	306	8	9
10	212	287	8	8
11	212	287	8	8
12	203	274	7	8
13	184	249	7	7
14	170	230	6	6
15	170	230	6	6
16	165	223	6	6
17	94	128	3	4
18	52	70	2	2
19	47	64	2	2
20	19	26	1	1
21	14	19	1	1
22	14	19	1	1
23	9	13	0	0
24	9	13	0	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	4	1109	2	35	No	No	No	No	No	No	No	No	No	No
2	4	1064	2	33	No	No	No	No	No	No	No	No	No	No
3	4	1043	2	33	No	No	No	No	No	No	No	No	No	No
4	4	887	2	28	No	No	No	No	No	No	No	No	No	No
5	4	843	2	27	No	No	No	No	No	No	No	No	No	No
6	4	754	2	24	No	No	No	No	No	No	No	No	No	No
7	4	699	2	22	No	No	No	No	No	No	No	No	No	No
8	4	666	2	21	No	No	No	No	No	No	No	No	No	No
9	4	532	2	17	No	No	No	No	No	No	No	No	No	No
10	4	499	2	16	No	No	No	No	No	No	No	No	No	No
11	4	499	2	16	No	No	No	No	No	No	No	No	No	No
12	4	477	2	15	No	No	No	No	No	No	No	No	No	No
13	4	433	2	14	No	No	No	No	No	No	No	No	No	No
14	4	400	2	12	No	No	No	No	No	No	No	No	No	No
15	4	400	2	12	No	No	No	No	No	No	No	No	No	No
16	4	388	2	12	No	No	No	No	No	No	No	No	No	No
17	4	222	2	7	No	No	No	No	No	No	No	No	No	No
18	4	122	2	4	No	No	No	No	No	No	No	No	No	No
19	4	111	2	4	No	No	No	No	No	No	No	No	No	No
20	4	45	2	2	No	No	No	No	No	No	No	No	No	No
21	4	33	2	2	No	No	No	No	No	No	No	No	No	No
22	4	33	2	2	No	No	No	No	No	No	No	No	No	No
23	4	22	2	0	No	No	No	No	No	No	No	No	No	No
24	4	22	2	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	15	24.6
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:04	0:07
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	17	18
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	1144	1144
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Yes	Yes
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	

Signal Warrants Report For Intersection 19: McLaughlin Rd @ Encanto Dr

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	E
1	191	173	143
2	183	166	137
3	180	163	134
4	153	138	114
5	145	131	109
6	130	118	97
7	120	109	90
8	115	104	86
9	92	83	69
10	86	78	64
11	86	78	64
12	82	74	61
13	74	67	56
14	69	62	51
15	69	62	51
16	67	61	50
17	38	35	29
18	21	19	16
19	19	17	14
20	8	7	6
21	6	5	4
22	6	5	4
23	4	3	3
24	4	3	3

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	364	1	143	No	No	No	Yes	No	No	No	No	No	No
2	2	349	1	137	No	No	No	Yes	No	No	No	No	No	No
3	2	343	1	134	No	No	No	Yes	No	No	No	No	No	No
4	2	291	1	114	No	No	No	No	No	No	No	No	No	No
5	2	276	1	109	No	No	No	No	No	No	No	No	No	No
6	2	248	1	97	No	No	No	No	No	No	No	No	No	No
7	2	229	1	90	No	No	No	No	No	No	No	No	No	No
8	2	219	1	86	No	No	No	No	No	No	No	No	No	No
9	2	175	1	69	No	No	No	No	No	No	No	No	No	No
10	2	164	1	64	No	No	No	No	No	No	No	No	No	No
11	2	164	1	64	No	No	No	No	No	No	No	No	No	No
12	2	156	1	61	No	No	No	No	No	No	No	No	No	No
13	2	141	1	56	No	No	No	No	No	No	No	No	No	No
14	2	131	1	51	No	No	No	No	No	No	No	No	No	No
15	2	131	1	51	No	No	No	No	No	No	No	No	No	No
16	2	128	1	50	No	No	No	No	No	No	No	No	No	No
17	2	73	1	29	No	No	No	No	No	No	No	No	No	No
18	2	40	1	16	No	No	No	No	No	No	No	No	No	No
19	2	36	1	14	No	No	No	No	No	No	No	No	No	No
20	2	15	1	6	No	No	No	No	No	No	No	No	No	No
21	2	11	1	4	No	No	No	No	No	No	No	No	No	No
22	2	11	1	4	No	No	No	No	No	No	No	No	No	No
23	2	7	1	3	No	No	No	No	No	No	No	No	No	No
24	2	7	1	3	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	3	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E
Total Stopped Delay Per Vehicle on Minor Approach (s)	12.4
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:29
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	143
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	507
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 20: McLaughlin Rd @ Trumble Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E, W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	S	N	E	W
1	39	27	70	91
2	37	26	67	87
3	37	25	66	86
4	31	22	56	73
5	30	21	53	69
6	27	18	48	62
7	25	17	44	57
8	23	16	42	55
9	19	13	34	44
10	18	12	32	41
11	18	12	32	41
12	17	12	30	39
13	15	11	27	35
14	14	10	25	33
15	14	10	25	33
16	14	9	25	32
17	8	5	14	18
18	4	3	8	10
19	4	3	7	9
20	2	1	3	4
21	1	1	2	3
22	1	1	2	3
23	1	1	1	2
24	1	1	1	2

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	66	2	161	No	No	No	No	No	No	No	No	No	No
2	2	63	2	154	No	No	No	No	No	No	No	No	No	No
3	2	62	2	152	No	No	No	No	No	No	No	No	No	No
4	2	53	2	129	No	No	No	No	No	No	No	No	No	No
5	2	51	2	122	No	No	No	No	No	No	No	No	No	No
6	2	45	2	110	No	No	No	No	No	No	No	No	No	No
7	2	42	2	101	No	No	No	No	No	No	No	No	No	No
8	2	39	2	97	No	No	No	No	No	No	No	No	No	No
9	2	32	2	78	No	No	No	No	No	No	No	No	No	No
10	2	30	2	73	No	No	No	No	No	No	No	No	No	No
11	2	30	2	73	No	No	No	No	No	No	No	No	No	No
12	2	29	2	69	No	No	No	No	No	No	No	No	No	No
13	2	26	2	62	No	No	No	No	No	No	No	No	No	No
14	2	24	2	58	No	No	No	No	No	No	No	No	No	No
15	2	24	2	58	No	No	No	No	No	No	No	No	No	No
16	2	23	2	57	No	No	No	No	No	No	No	No	No	No
17	2	13	2	32	No	No	No	No	No	No	No	No	No	No
18	2	7	2	18	No	No	No	No	No	No	No	No	No	No
19	2	7	2	16	No	No	No	No	No	No	No	No	No	No
20	2	3	2	7	No	No	No	No	No	No	No	No	No	No
21	2	2	2	5	No	No	No	No	No	No	No	No	No	No
22	2	2	2	5	No	No	No	No	No	No	No	No	No	No
23	2	2	2	3	No	No	No	No	No	No	No	No	No	No
24	2	2	2	3	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	7.6	7.5
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:08	0:11
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	70	91
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	227	227
Number of Approaches on Intersection	4	4
Total Volume Condition Met	No	No
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	

Signal Warrants Report For Intersection 21: McLaughlin Rd @ Sherman Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E, W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	S	N	E	W
1	10	72	0	44
2	10	69	0	42
3	9	68	0	41
4	8	58	0	35
5	8	55	0	33
6	7	49	0	30
7	6	45	0	28
8	6	43	0	26
9	5	35	0	21
10	5	32	0	20
11	5	32	0	20
12	4	31	0	19
13	4	28	0	17
14	4	26	0	16
15	4	26	0	16
16	4	25	0	15
17	2	14	0	9
18	1	8	0	5
19	1	7	0	4
20	0	3	0	2
21	0	2	0	1
22	0	2	0	1
23	0	1	0	1
24	0	1	0	1

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	82	2	44	No	No	No	No	No	No	No	No	No	No
2	2	79	2	42	No	No	No	No	No	No	No	No	No	No
3	2	77	2	41	No	No	No	No	No	No	No	No	No	No
4	2	66	2	35	No	No	No	No	No	No	No	No	No	No
5	2	63	2	33	No	No	No	No	No	No	No	No	No	No
6	2	56	2	30	No	No	No	No	No	No	No	No	No	No
7	2	51	2	28	No	No	No	No	No	No	No	No	No	No
8	2	49	2	26	No	No	No	No	No	No	No	No	No	No
9	2	40	2	21	No	No	No	No	No	No	No	No	No	No
10	2	37	2	20	No	No	No	No	No	No	No	No	No	No
11	2	37	2	20	No	No	No	No	No	No	No	No	No	No
12	2	35	2	19	No	No	No	No	No	No	No	No	No	No
13	2	32	2	17	No	No	No	No	No	No	No	No	No	No
14	2	30	2	16	No	No	No	No	No	No	No	No	No	No
15	2	30	2	16	No	No	No	No	No	No	No	No	No	No
16	2	29	2	15	No	No	No	No	No	No	No	No	No	No
17	2	16	2	9	No	No	No	No	No	No	No	No	No	No
18	2	9	2	5	No	No	No	No	No	No	No	No	No	No
19	2	8	2	4	No	No	No	No	No	No	No	No	No	No
20	2	3	2	2	No	No	No	No	No	No	No	No	No	No
21	2	2	2	1	No	No	No	No	No	No	No	No	No	No
22	2	2	2	1	No	No	No	No	No	No	No	No	No	No
23	2	1	2	1	No	No	No	No	No	No	No	No	No	No
24	2	1	2	1	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	8.9	9
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:00	0:06
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	0	44
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	126	126
Number of Approaches on Intersection	4	4
Total Volume Condition Met	No	No
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	

Signal Warrants Report For Intersection 22: Rouse Rd @ Murrieta Rd

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E, W
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	S	N	E	W
1	430	548	111	42
2	413	526	107	40
3	404	515	104	39
4	344	438	89	34
5	327	416	84	32
6	292	373	75	29
7	271	345	70	26
8	258	329	67	25
9	206	263	53	20
10	194	247	50	19
11	194	247	50	19
12	185	236	48	18
13	168	214	43	16
14	155	197	40	15
15	155	197	40	15
16	151	192	39	15
17	86	110	22	8
18	47	60	12	5
19	43	55	11	4
20	17	22	4	2
21	13	16	3	1
22	13	16	3	1
23	9	11	2	1
24	9	11	2	1

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	6	978	6	153	No	No	No	No	Yes	Yes	Yes	Yes	Yes	No
2	6	939	6	147	No	No	No	No	Yes	Yes	Yes	Yes	Yes	No
3	6	919	6	143	No	No	No	No	Yes	Yes	Yes	Yes	Yes	No
4	6	782	6	123	No	No	No	No	No	Yes	Yes	Yes	No	No
5	6	743	6	116	No	No	No	No	No	Yes	Yes	Yes	No	No
6	6	665	6	104	No	No	No	No	No	No	Yes	Yes	No	No
7	6	616	6	96	No	No	No	No	No	No	No	Yes	No	No
8	6	587	6	92	No	No	No	No	No	No	No	Yes	No	No
9	6	469	6	73	No	No	No	No	No	No	No	No	No	No
10	6	441	6	69	No	No	No	No	No	No	No	No	No	No
11	6	441	6	69	No	No	No	No	No	No	No	No	No	No
12	6	421	6	66	No	No	No	No	No	No	No	No	No	No
13	6	382	6	59	No	No	No	No	No	No	No	No	No	No
14	6	352	6	55	No	No	No	No	No	No	No	No	No	No
15	6	352	6	55	No	No	No	No	No	No	No	No	No	No
16	6	343	6	54	No	No	No	No	No	No	No	No	No	No
17	6	196	6	30	No	No	No	No	No	No	No	No	No	No
18	6	107	6	17	No	No	No	No	No	No	No	No	No	No
19	6	98	6	15	No	No	No	No	No	No	No	No	No	No
20	6	39	6	6	No	No	No	No	No	No	No	No	No	No
21	6	29	6	4	No	No	No	No	No	No	No	No	No	No
22	6	29	6	4	No	No	No	No	No	No	No	No	No	No
23	6	20	6	3	No	No	No	No	No	No	No	No	No	No
24	6	20	6	3	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	3	5	6	8	3	0

Warrant 3 Condition A

Orientation	E	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	15.8	28.6
Number of Lanes on Minor Street Approach	3	3
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:29	0:20
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	111	42
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	1131	1131
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Yes	Yes
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	

Signal Warrants Report For Intersection 23: Rouse Rd @ Encanto Dr

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	E
1	240	250	57
2	230	240	55
3	226	235	54
4	192	200	46
5	182	190	43
6	163	170	39
7	151	158	36
8	144	150	34
9	115	120	27
10	108	113	26
11	108	113	26
12	103	108	25
13	94	98	22
14	86	90	21
15	86	90	21
16	84	88	20
17	48	50	11
18	26	28	6
19	24	25	6
20	10	10	2
21	7	8	2
22	7	8	2
23	5	5	1
24	5	5	1

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	490	1	57	No	No	No	No	No	No	No	No	No	No
2	2	470	1	55	No	No	No	No	No	No	No	No	No	No
3	2	461	1	54	No	No	No	No	No	No	No	No	No	No
4	2	392	1	46	No	No	No	No	No	No	No	No	No	No
5	2	372	1	43	No	No	No	No	No	No	No	No	No	No
6	2	333	1	39	No	No	No	No	No	No	No	No	No	No
7	2	309	1	36	No	No	No	No	No	No	No	No	No	No
8	2	294	1	34	No	No	No	No	No	No	No	No	No	No
9	2	235	1	27	No	No	No	No	No	No	No	No	No	No
10	2	221	1	26	No	No	No	No	No	No	No	No	No	No
11	2	221	1	26	No	No	No	No	No	No	No	No	No	No
12	2	211	1	25	No	No	No	No	No	No	No	No	No	No
13	2	192	1	22	No	No	No	No	No	No	No	No	No	No
14	2	176	1	21	No	No	No	No	No	No	No	No	No	No
15	2	176	1	21	No	No	No	No	No	No	No	No	No	No
16	2	172	1	20	No	No	No	No	No	No	No	No	No	No
17	2	98	1	11	No	No	No	No	No	No	No	No	No	No
18	2	54	1	6	No	No	No	No	No	No	No	No	No	No
19	2	49	1	6	No	No	No	No	No	No	No	No	No	No
20	2	20	1	2	No	No	No	No	No	No	No	No	No	No
21	2	15	1	2	No	No	No	No	No	No	No	No	No	No
22	2	15	1	2	No	No	No	No	No	No	No	No	No	No
23	2	10	1	1	No	No	No	No	No	No	No	No	No	No
24	2	10	1	1	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E
Total Stopped Delay Per Vehicle on Minor Approach (s)	11.9
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:11
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	57
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	547
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 28: Sherman Rd @ Project dwy 1

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	E
1	387	406	334
2	372	390	321
3	364	382	314
4	310	325	267
5	294	309	254
6	263	276	227
7	244	256	210
8	232	244	200
9	186	195	160
10	174	183	150
11	174	183	150
12	166	175	144
13	151	158	130
14	139	146	120
15	139	146	120
16	135	142	117
17	77	81	67
18	43	45	37
19	39	41	33
20	15	16	13
21	12	12	10
22	12	12	10
23	8	8	7
24	8	8	7

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	3	793	1	334	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
2	3	762	1	321	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
3	3	746	1	314	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
4	3	635	1	267	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No	No
5	3	603	1	254	Yes	Yes	Yes	Yes	No	No	No	Yes	No	No
6	3	539	1	227	No	Yes	Yes	Yes	No	No	No	Yes	No	No
7	3	500	1	210	No	Yes	Yes	Yes	No	No	No	No	No	No
8	3	476	1	200	No	No	Yes	Yes	No	No	No	No	No	No
9	3	381	1	160	No	No	No	Yes	No	No	No	No	No	No
10	3	357	1	150	No	No	No	Yes	No	No	No	No	No	No
11	3	357	1	150	No	No	No	Yes	No	No	No	No	No	No
12	3	341	1	144	No	No	No	Yes	No	No	No	No	No	No
13	3	309	1	130	No	No	No	No	No	No	No	No	No	No
14	3	285	1	120	No	No	No	No	No	No	No	No	No	No
15	3	285	1	120	No	No	No	No	No	No	No	No	No	No
16	3	277	1	117	No	No	No	No	No	No	No	No	No	No
17	3	158	1	67	No	No	No	No	No	No	No	No	No	No
18	3	88	1	37	No	No	No	No	No	No	No	No	No	No
19	3	80	1	33	No	No	No	No	No	No	No	No	No	No
20	3	31	1	13	No	No	No	No	No	No	No	No	No	No
21	3	24	1	10	No	No	No	No	No	No	No	No	No	No
22	3	24	1	10	No	No	No	No	No	No	No	No	No	No
23	3	16	1	7	No	No	No	No	No	No	No	No	No	No
24	3	16	1	7	No	No	No	No	No	No	No	No	No	No
Hours Met					5	7	8	12	0	3	4	6	3	0

Warrant 3 Condition A

Orientation	E
Total Stopped Delay Per Vehicle on Minor Approach (s)	22.8
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	2:07
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	334
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	1127
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 29: Sherman Rd @ Project dwy 2

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	W
1	379	254	10
2	364	244	10
3	356	239	9
4	303	203	8
5	288	193	8
6	258	173	7
7	239	160	6
8	227	152	6
9	182	122	5
10	171	114	5
11	171	114	5
12	163	109	4
13	148	99	4
14	136	91	4
15	136	91	4
16	133	89	4
17	76	51	2
18	42	28	1
19	38	25	1
20	15	10	0
21	11	8	0
22	11	8	0
23	8	5	0
24	8	5	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	633	1	10	No	No	No	No	No	No	No	No	No	No
2	2	608	1	10	No	No	No	No	No	No	No	No	No	No
3	2	595	1	9	No	No	No	No	No	No	No	No	No	No
4	2	506	1	8	No	No	No	No	No	No	No	No	No	No
5	2	481	1	8	No	No	No	No	No	No	No	No	No	No
6	2	431	1	7	No	No	No	No	No	No	No	No	No	No
7	2	399	1	6	No	No	No	No	No	No	No	No	No	No
8	2	379	1	6	No	No	No	No	No	No	No	No	No	No
9	2	304	1	5	No	No	No	No	No	No	No	No	No	No
10	2	285	1	5	No	No	No	No	No	No	No	No	No	No
11	2	285	1	5	No	No	No	No	No	No	No	No	No	No
12	2	272	1	4	No	No	No	No	No	No	No	No	No	No
13	2	247	1	4	No	No	No	No	No	No	No	No	No	No
14	2	227	1	4	No	No	No	No	No	No	No	No	No	No
15	2	227	1	4	No	No	No	No	No	No	No	No	No	No
16	2	222	1	4	No	No	No	No	No	No	No	No	No	No
17	2	127	1	2	No	No	No	No	No	No	No	No	No	No
18	2	70	1	1	No	No	No	No	No	No	No	No	No	No
19	2	63	1	1	No	No	No	No	No	No	No	No	No	No
20	2	25	1	0	No	No	No	No	No	No	No	No	No	No
21	2	19	1	0	No	No	No	No	No	No	No	No	No	No
22	2	19	1	0	No	No	No	No	No	No	No	No	No	No
23	2	13	1	0	No	No	No	No	No	No	No	No	No	No
24	2	13	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	13.3
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:02
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	10
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	643
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 30: Sherman Rd @ Project dwy 3

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	N, S
Minor Approaches	E, W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	N	S	E	W
1	249	84	351	0
2	239	81	337	0
3	234	79	330	0
4	199	67	281	0
5	189	64	267	0
6	169	57	239	0
7	157	53	221	0
8	149	50	211	0
9	120	40	168	0
10	112	38	158	0
11	112	38	158	0
12	107	36	151	0
13	97	33	137	0
14	90	30	126	0
15	90	30	126	0
16	87	29	123	0
17	50	17	70	0
18	27	9	39	0
19	25	8	35	0
20	10	3	14	0
21	7	3	11	0
22	7	3	11	0
23	5	2	7	0
24	5	2	7	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	3	333	2	351	No	No	No	No	No	No	No	No	No	No
2	3	320	2	337	No	No	No	No	No	No	No	No	No	No
3	3	313	2	330	No	No	No	No	No	No	No	No	No	No
4	3	266	2	281	No	No	No	No	No	No	No	No	No	No
5	3	253	2	267	No	No	No	No	No	No	No	No	No	No
6	3	226	2	239	No	No	No	No	No	No	No	No	No	No
7	3	210	2	221	No	No	No	No	No	No	No	No	No	No
8	3	199	2	211	No	No	No	No	No	No	No	No	No	No
9	3	160	2	168	No	No	No	No	No	No	No	No	No	No
10	3	150	2	158	No	No	No	No	No	No	No	No	No	No
11	3	150	2	158	No	No	No	No	No	No	No	No	No	No
12	3	143	2	151	No	No	No	No	No	No	No	No	No	No
13	3	130	2	137	No	No	No	No	No	No	No	No	No	No
14	3	120	2	126	No	No	No	No	No	No	No	No	No	No
15	3	120	2	126	No	No	No	No	No	No	No	No	No	No
16	3	116	2	123	No	No	No	No	No	No	No	No	No	No
17	3	67	2	70	No	No	No	No	No	No	No	No	No	No
18	3	36	2	39	No	No	No	No	No	No	No	No	No	No
19	3	33	2	35	No	No	No	No	No	No	No	No	No	No
20	3	13	2	14	No	No	No	No	No	No	No	No	No	No
21	3	10	2	11	No	No	No	No	No	No	No	No	No	No
22	3	10	2	11	No	No	No	No	No	No	No	No	No	No
23	3	7	2	7	No	No	No	No	No	No	No	No	No	No
24	3	7	2	7	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	12.3	15.2
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	1:11	0:00
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	351	0
High Minor Volume Condition Met	Yes	No
Total Entering Volume on All Approaches During Same Hour	684	684
Number of Approaches on Intersection	4	4
Total Volume Condition Met	No	No
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	

Signal Warrants Report For Intersection 31: Trumble Rd @ Project dwy 4

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	E
1	19	7	10
2	18	7	10
3	18	7	9
4	15	6	8
5	14	5	8
6	13	5	7
7	12	4	6
8	11	4	6
9	9	3	5
10	9	3	5
11	9	3	5
12	8	3	4
13	7	3	4
14	7	3	4
15	7	3	4
16	7	2	4
17	4	1	2
18	2	1	1
19	2	1	1
20	1	0	0
21	1	0	0
22	1	0	0
23	0	0	0
24	0	0	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	26	1	10	No	No	No	No	No	No	No	No	No	No
2	2	25	1	10	No	No	No	No	No	No	No	No	No	No
3	2	25	1	9	No	No	No	No	No	No	No	No	No	No
4	2	21	1	8	No	No	No	No	No	No	No	No	No	No
5	2	19	1	8	No	No	No	No	No	No	No	No	No	No
6	2	18	1	7	No	No	No	No	No	No	No	No	No	No
7	2	16	1	6	No	No	No	No	No	No	No	No	No	No
8	2	15	1	6	No	No	No	No	No	No	No	No	No	No
9	2	12	1	5	No	No	No	No	No	No	No	No	No	No
10	2	12	1	5	No	No	No	No	No	No	No	No	No	No
11	2	12	1	5	No	No	No	No	No	No	No	No	No	No
12	2	11	1	4	No	No	No	No	No	No	No	No	No	No
13	2	10	1	4	No	No	No	No	No	No	No	No	No	No
14	2	10	1	4	No	No	No	No	No	No	No	No	No	No
15	2	10	1	4	No	No	No	No	No	No	No	No	No	No
16	2	9	1	4	No	No	No	No	No	No	No	No	No	No
17	2	5	1	2	No	No	No	No	No	No	No	No	No	No
18	2	3	1	1	No	No	No	No	No	No	No	No	No	No
19	2	3	1	1	No	No	No	No	No	No	No	No	No	No
20	2	1	1	0	No	No	No	No	No	No	No	No	No	No
21	2	1	1	0	No	No	No	No	No	No	No	No	No	No
22	2	1	1	0	No	No	No	No	No	No	No	No	No	No
23	2	0	1	0	No	No	No	No	No	No	No	No	No	No
24	2	0	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E
Total Stopped Delay Per Vehicle on Minor Approach (s)	8.7
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:01
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	10
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	36
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 32: Trumble Rd @ Project dwy 5

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	E
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	E
1	25	17	10
2	24	16	10
3	24	16	9
4	20	14	8
5	19	13	8
6	17	12	7
7	16	11	6
8	15	10	6
9	12	8	5
10	11	8	5
11	11	8	5
12	11	7	4
13	10	7	4
14	9	6	4
15	9	6	4
16	9	6	4
17	5	3	2
18	3	2	1
19	3	2	1
20	1	1	0
21	1	1	0
22	1	1	0
23	1	0	0
24	1	0	0

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	42	1	10	No	No	No	No	No	No	No	No	No	No
2	2	40	1	10	No	No	No	No	No	No	No	No	No	No
3	2	40	1	9	No	No	No	No	No	No	No	No	No	No
4	2	34	1	8	No	No	No	No	No	No	No	No	No	No
5	2	32	1	8	No	No	No	No	No	No	No	No	No	No
6	2	29	1	7	No	No	No	No	No	No	No	No	No	No
7	2	27	1	6	No	No	No	No	No	No	No	No	No	No
8	2	25	1	6	No	No	No	No	No	No	No	No	No	No
9	2	20	1	5	No	No	No	No	No	No	No	No	No	No
10	2	19	1	5	No	No	No	No	No	No	No	No	No	No
11	2	19	1	5	No	No	No	No	No	No	No	No	No	No
12	2	18	1	4	No	No	No	No	No	No	No	No	No	No
13	2	17	1	4	No	No	No	No	No	No	No	No	No	No
14	2	15	1	4	No	No	No	No	No	No	No	No	No	No
15	2	15	1	4	No	No	No	No	No	No	No	No	No	No
16	2	15	1	4	No	No	No	No	No	No	No	No	No	No
17	2	8	1	2	No	No	No	No	No	No	No	No	No	No
18	2	5	1	1	No	No	No	No	No	No	No	No	No	No
19	2	5	1	1	No	No	No	No	No	No	No	No	No	No
20	2	2	1	0	No	No	No	No	No	No	No	No	No	No
21	2	2	1	0	No	No	No	No	No	No	No	No	No	No
22	2	2	1	0	No	No	No	No	No	No	No	No	No	No
23	2	1	1	0	No	No	No	No	No	No	No	No	No	No
24	2	1	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	E
Total Stopped Delay Per Vehicle on Minor Approach (s)	8.8
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:01
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	10
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	52
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 33: Dawson Rd @ Project dwy 6

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	W
1	96	152	143
2	92	146	137
3	90	143	134
4	77	122	114
5	73	116	109
6	65	103	97
7	60	96	90
8	58	91	86
9	46	73	69
10	43	68	64
11	43	68	64
12	41	65	61
13	37	59	56
14	35	55	51
15	35	55	51
16	34	53	50
17	19	30	29
18	11	17	16
19	10	15	14
20	4	6	6
21	3	5	4
22	3	5	4
23	2	3	3
24	2	3	3

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	248	1	143	No	No	No	No	No	No	No	No	No	No
2	2	238	1	137	No	No	No	No	No	No	No	No	No	No
3	2	233	1	134	No	No	No	No	No	No	No	No	No	No
4	2	199	1	114	No	No	No	No	No	No	No	No	No	No
5	2	189	1	109	No	No	No	No	No	No	No	No	No	No
6	2	168	1	97	No	No	No	No	No	No	No	No	No	No
7	2	156	1	90	No	No	No	No	No	No	No	No	No	No
8	2	149	1	86	No	No	No	No	No	No	No	No	No	No
9	2	119	1	69	No	No	No	No	No	No	No	No	No	No
10	2	111	1	64	No	No	No	No	No	No	No	No	No	No
11	2	111	1	64	No	No	No	No	No	No	No	No	No	No
12	2	106	1	61	No	No	No	No	No	No	No	No	No	No
13	2	96	1	56	No	No	No	No	No	No	No	No	No	No
14	2	90	1	51	No	No	No	No	No	No	No	No	No	No
15	2	90	1	51	No	No	No	No	No	No	No	No	No	No
16	2	87	1	50	No	No	No	No	No	No	No	No	No	No
17	2	49	1	29	No	No	No	No	No	No	No	No	No	No
18	2	28	1	16	No	No	No	No	No	No	No	No	No	No
19	2	25	1	14	No	No	No	No	No	No	No	No	No	No
20	2	10	1	6	No	No	No	No	No	No	No	No	No	No
21	2	8	1	4	No	No	No	No	No	No	No	No	No	No
22	2	8	1	4	No	No	No	No	No	No	No	No	No	No
23	2	5	1	3	No	No	No	No	No	No	No	No	No	No
24	2	5	1	3	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	10.8
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:25
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	143
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	391
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 34: Dawson Rd @ Project dwy 7

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	N, S
Minor Approaches	W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	N	S	W
1	64	1	95
2	61	1	91
3	60	1	89
4	51	1	76
5	49	1	72
6	44	1	65
7	40	1	60
8	38	1	57
9	31	0	46
10	29	0	43
11	29	0	43
12	28	0	41
13	25	0	37
14	23	0	34
15	23	0	34
16	22	0	33
17	13	0	19
18	7	0	10
19	6	0	10
20	3	0	4
21	2	0	3
22	2	0	3
23	1	0	2
24	1	0	2

Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	65	1	95	No	No	No	No	No	No	No	No	No	No
2	2	62	1	91	No	No	No	No	No	No	No	No	No	No
3	2	61	1	89	No	No	No	No	No	No	No	No	No	No
4	2	52	1	76	No	No	No	No	No	No	No	No	No	No
5	2	50	1	72	No	No	No	No	No	No	No	No	No	No
6	2	45	1	65	No	No	No	No	No	No	No	No	No	No
7	2	41	1	60	No	No	No	No	No	No	No	No	No	No
8	2	39	1	57	No	No	No	No	No	No	No	No	No	No
9	2	31	1	46	No	No	No	No	No	No	No	No	No	No
10	2	29	1	43	No	No	No	No	No	No	No	No	No	No
11	2	29	1	43	No	No	No	No	No	No	No	No	No	No
12	2	28	1	41	No	No	No	No	No	No	No	No	No	No
13	2	25	1	37	No	No	No	No	No	No	No	No	No	No
14	2	23	1	34	No	No	No	No	No	No	No	No	No	No
15	2	23	1	34	No	No	No	No	No	No	No	No	No	No
16	2	22	1	33	No	No	No	No	No	No	No	No	No	No
17	2	13	1	19	No	No	No	No	No	No	No	No	No	No
18	2	7	1	10	No	No	No	No	No	No	No	No	No	No
19	2	6	1	10	No	No	No	No	No	No	No	No	No	No
20	2	3	1	4	No	No	No	No	No	No	No	No	No	No
21	2	2	1	3	No	No	No	No	No	No	No	No	No	No
22	2	2	1	3	No	No	No	No	No	No	No	No	No	No
23	2	1	1	2	No	No	No	No	No	No	No	No	No	No
24	2	1	1	2	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	9.1
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:14
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	95
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	160
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No

Appendix H

Updated Project Trip Generation

Table 1: Trip Generation Rates
High-Cube Fulfillment Center Warehouse (sort)

Vehicle Type	PCE Factor ¹	Estimated Mix ²	Units ³	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Trip Generation Rates (classification, non-PCE) ⁴										
<i>Passenger Cars</i> ⁵	-	-	KSF	6.25	0.695	0.155	0.850	0.459	0.721	1.18
<i>2-axle Trucks</i>	-	16.7%		0.032	0.002	0.002	0.003	0.002	0.002	0.0033
<i>3-axle Trucks</i>	-	20.7%		0.039	0.002	0.002	0.004	0.002	0.002	0.004
<i>4-axle Trucks</i>	-	62.5%		0.119	0.006	0.006	0.013	0.006	0.007	0.013
Total		100%		6.44	0.705	0.165	0.87	0.468	0.732	1.2
Calculated Trip Generation Rates (PCE)										
<i>Passenger Cars</i> ⁵	1	-	KSF	6.25	0.695	0.155	0.85	0.459	0.721	1.18
<i>2-axle Trucks</i>	1.5	16.7%		0.05	0.003	0.003	0.006	0.002	0.003	0.005
<i>3-axle Trucks</i>	2	20.7%		0.08	0.004	0.004	0.008	0.004	0.004	0.008
<i>4-axle Trucks</i>	3	62.5%		0.36	0.019	0.019	0.038	0.017	0.020	0.037
Total		100%		6.74	0.721	0.181	0.902	0.482	0.748	1.23

¹ PCE factors per San Bernardino County Transportation Authority

² Truck mix per High-Cube Warehouse Vehicle Trip Generation Analysis, ITE (2017); Warehouse Truck Trip Study, SCAQMD (2014)

³ KSF = 1,000 square feet gross floor area

Table 2: Trip Generation Rates
Warehousing

Vehicle Type	PCE Factor ¹	Estimated Mix ²	Units ³	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Trip Generation Rates (classification, non-PCE)⁴										
<i>Passenger Cars⁵</i>	-	-	KSF	1.140	0.121	0.030	0.150	0.036	0.124	0.16
<i>2-axle Trucks</i>	-	16.7%		0.100	0.002	0.002	0.003	0.003	0.002	0.005
<i>3-axle Trucks</i>	-	20.7%		0.124	0.002	0.002	0.004	0.003	0.003	0.006
<i>4-axle Trucks</i>	-	62.5%		0.375	0.007	0.006	0.013	0.010	0.009	0.019
Total		100%		1.74	0.131	0.039	0.17	0.051	0.139	0.19
Calculated Trip Generation Rates (PCE)										
<i>Passenger Cars⁵</i>	1	-	KSF	1.14	0.121	0.030	0.151	0.036	0.124	0.16
<i>2-axle Trucks</i>	1.5	16.7%		0.15	0.003	0.002	0.005	0.004	0.004	0.008
<i>3-axle Trucks</i>	2	20.7%		0.25	0.004	0.004	0.008	0.006	0.006	0.012
<i>4-axle Trucks</i>	3	62.5%		1.13	0.020	0.018	0.038	0.029	0.027	0.056
Total		100%		2.67	0.148	0.054	0.202	0.075	0.161	0.236

¹ PCE factors per San Bernardino County Transportation Authority

² Truck mix per High-Cube Warehouse Vehicle Trip Generation Analysis, ITE (2017); Warehouse Truck Trip Study, SCAQMD (2014)

³ KSF = 1,000 square feet gross floor area

Table 3: Project Trip Generation

Core 5 Fulfillment Center (Building 1)

Vehicle Type	PCE Factor ¹	Units ²	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Proposed Project Trip Generation (classification, non-PCE)									
<i>Passenger Cars</i>	-	1,254 KSF	7,839	871	195	1,066	575	905	1,480
<i>2-axle Trucks</i>	-		40	2	2	4	2	2	4
<i>3-axle Trucks</i>	-		49	3	3	6	2	3	5
<i>4-axle Trucks</i>	-		149	8	8	16	7	8	15
Total				8,077	884	208	1,092	586	918
Passenger Car Equivalent (PCE) Project Trip Generation									
<i>Passenger Cars</i>	1	1,254 KSF	7,839	871	195	1,066	575	905	1,480
<i>2-axle Trucks</i>	1.5		60	3	3	6	3	3	6
<i>3-axle Trucks</i>	2		98	6	6	12	4	6	10
<i>4-axle Trucks</i>	3		447	24	24	48	21	24	45
Total				8,444	904	228	1,132	603	938

¹ PCE factors per San Bernardino County Transportation Authority

² KSF = 1,000 square feet gross floor area

Table 4: Project Trip Generation

Core 5 Warehouse (Building 2)

Vehicle Type	PCE Factor ¹	Units ²	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Proposed Project Trip Generation (classification, non-PCE)									
<i>Passenger Cars</i>	-	386 KSF	440	47	11	58	14	48	62
<i>2-axle Trucks</i>	-		39	1	1	2	1	1	2
<i>3-axle Trucks</i>	-		48	1	1	2	1	1	2
<i>4-axle Trucks</i>	-		145	3	2	5	4	3	7
Total				672	52	15	67	20	53
Passenger Car Equivalent (PCE) Project Trip Generation									
<i>Passenger Cars</i>	1	386 KSF	440	47	11	58	14	48	62
<i>2-axle Trucks</i>	1.5		59	2	2	4	2	2	4
<i>3-axle Trucks</i>	2		96	2	2	4	2	2	4
<i>4-axle Trucks</i>	3		435	9	6	15	12	9	21
Total				1,030	60	21	81	30	61

¹ PCE factors per San Bernardino County Transportation Authority

² KSF = 1,000 square feet gross floor area

Table 5: Project Trip Generation

Core 5 Warehouse Project - Total

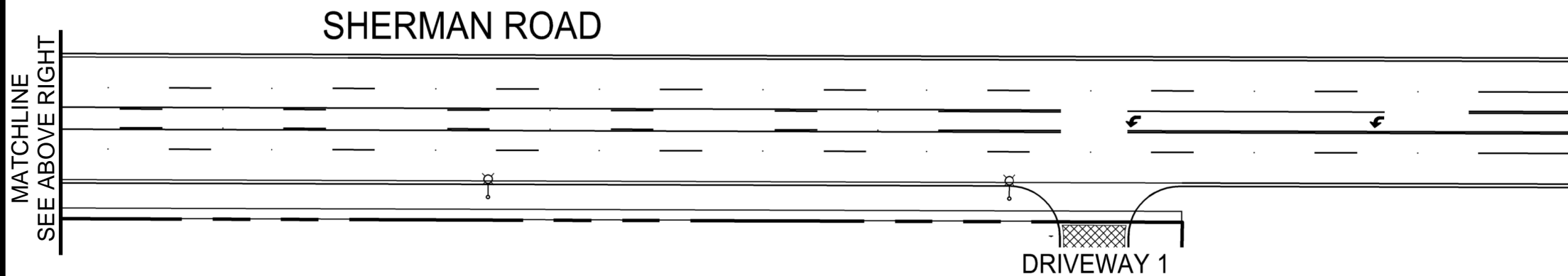
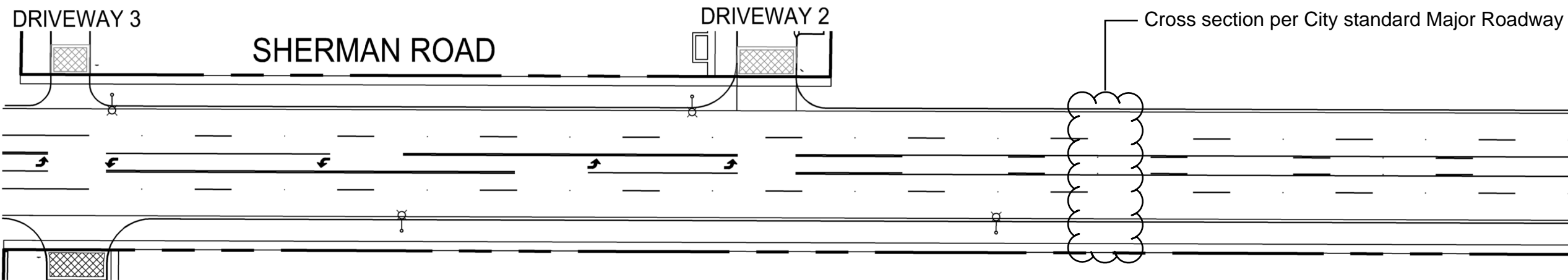
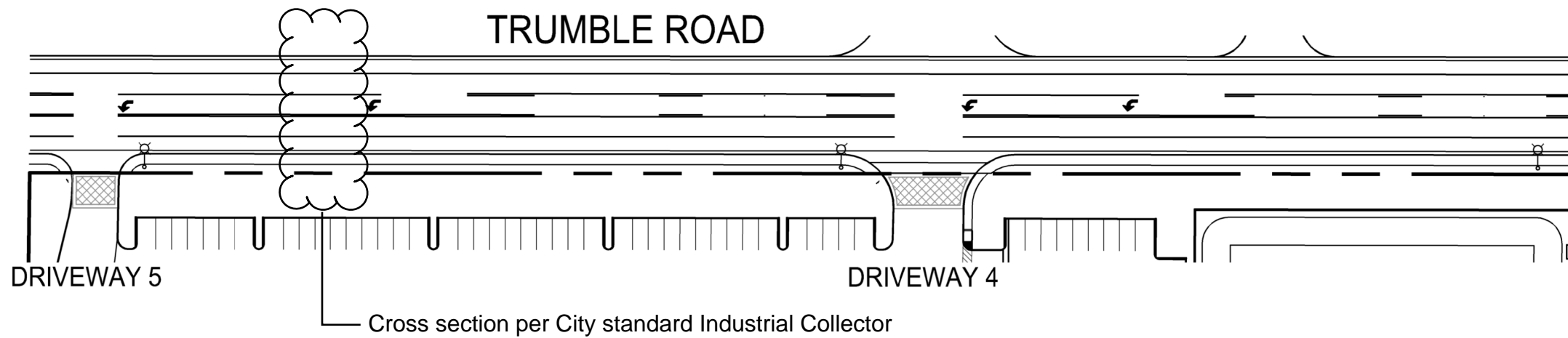
Vehicle Type	PCE Factor ¹	Units ²	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Proposed Project Trip Generation (classification, non-PCE)									
<i>Passenger Cars</i>	-	1,640 KSF	8,279	918	206	1,124	589	953	1,542
<i>2-axle Trucks</i>	-		79	3	3	6	3	3	6
<i>3-axle Trucks</i>	-		97	4	4	8	3	4	7
<i>4-axle Trucks</i>	-		294	11	10	21	11	11	22
Total				8,749	936	223	1,159	606	971
Passenger Car Equivalent (PCE) Project Trip Generation									
<i>Passenger Cars</i>	1	1,640 KSF	8,279	918	206	1,124	589	953	1,542
<i>2-axle Trucks</i>	1.5		119	5	5	10	5	5	10
<i>3-axle Trucks</i>	2		194	8	8	16	6	8	14
<i>4-axle Trucks</i>	3		882	33	30	63	33	33	66
Total				9,474	964	249	1,213	633	999

¹ PCE factors per San Bernardino County Transportation Authority

² KSF = 1,000 square feet gross floor area

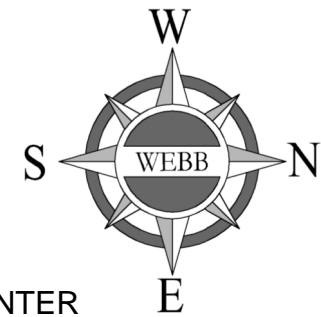
Appendix I

**Proposed Driveway and Roadway
Improvements along Project Frontage**

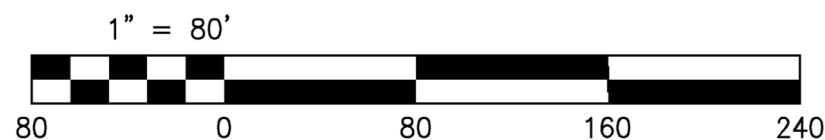


MATCHLINE
SEE ABOVE RIGHT

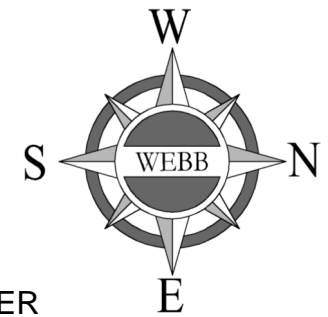
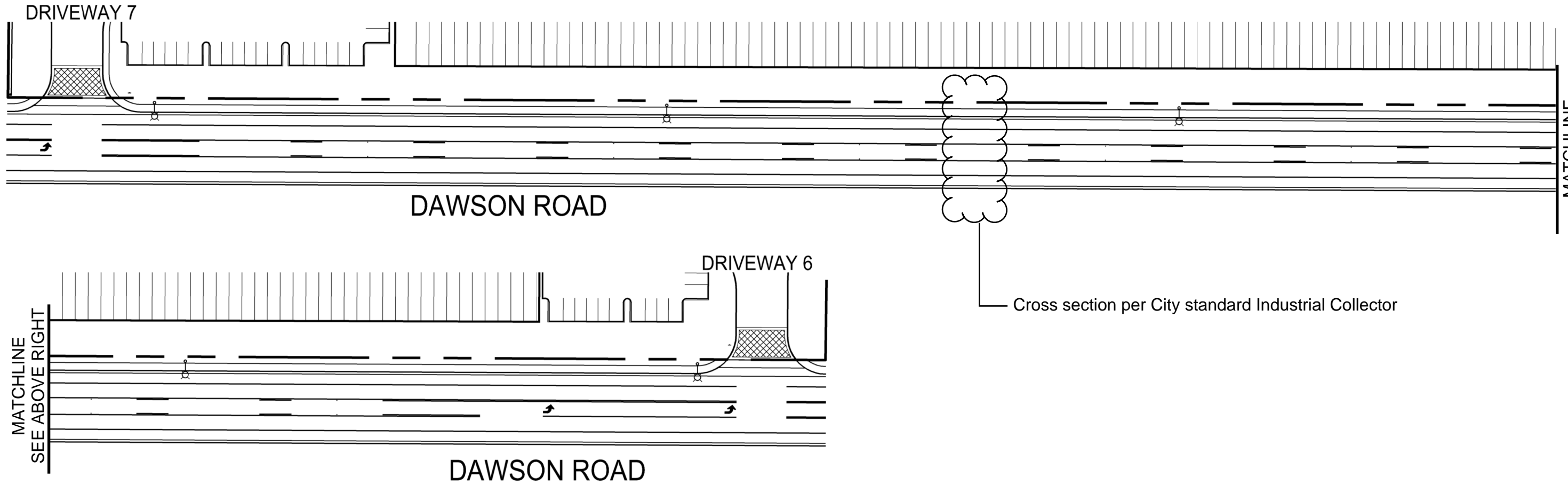
MATCHLINE
SEE BELOW LEFT



MENIFEE COMMERCE CENTER
CONCEPTUAL STRIPING PLAN

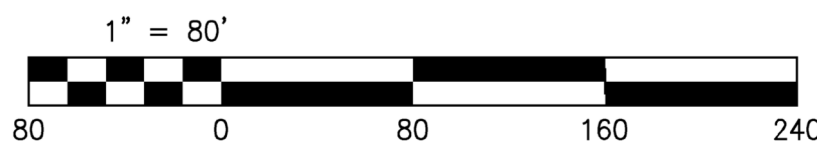


ALBERT A. WEBB ASSOCIATES	ENGINEERING CONSULTANTS 3788 McCRAY STREET RIVERSIDE CA. 92506 PH. (951) 686-1070 FAX (951) 788-1256	w.o. 19-0239 SHEET <div style="font-size: 2em; text-align: center;">1</div> OF 2 SHEETS
	<p style="text-align: center;">PRELIMINARY</p>	



PRELIMINARY

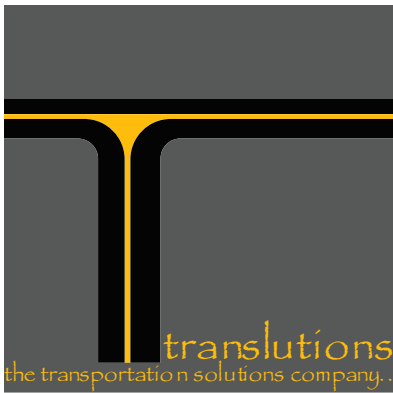
MENIFEE COMMERCE CENTER
CONCEPTUAL STRIPING PLAN



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		SHEET <div style="font-size: 2em; font-weight: bold; text-align: center;">2</div> OF 2 SHEETS

APPENDIX 9.11.2

VEHICLE MILES TRAVELED ANALYSIS



memorandum

DATE: August 10, 2021
TO: Nicholas R. Lowe, PE, Senior Engineer, Albert A. Webb Associates
FROM: Sandipan Bhattacharjee, PE, TE, AICP, ENV-SP
SUBJECT: Core 5 Menifee Warehouse – VMT Analysis

Translutions, Inc. (Translutions) is pleased to provide this memorandum discussing the Vehicle Miles Traveled (VMT) evaluation for the proposed Core 5 Menifee warehouse project (the Project). This memorandum is intended to satisfy the requirements for a VMT analysis established by the City of Menifee *Traffic Impact Analysis Guidelines for Vehicle Miles Traveled* (June 2020), as well as the requirements for the disclosure of potential impacts and mitigation measures per the California Environmental Quality Act (CEQA). The proposed project includes 1,640,130 square feet of warehousing uses located on Sherman Road between Ethanac Road and McLaughlin Road in the City of Menifee.

BACKGROUND AND GUIDANCE

Senate Bill 743 (SB-743), which was codified in Public Resources Code section 21099, was signed by the Governor in 2013 and directed the Governor's Office of Planning and Research (OPR) to identify alternative metrics for evaluating transportation impacts under CEQA. Pursuant to Section 21099, the criteria for determining the significance of transportation impacts must "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." Recently adopted changes to the CEQA Guidelines in response to Section 21099 include a new section (15064.3) that specifies that Vehicle Miles Traveled (VMT) is the most appropriate measure of transportation impacts. A separate Technical Advisory issued by OPR provides additional technical details on calculating VMT and assessing transportation impacts for various types of projects.

The City of Menifee has prepared the *Traffic Impact Analysis Guidelines for Vehicle Miles Traveled* (Guidelines) for Land Use Projects in June 2020 to address changes to CEQA pursuant to SB-743 to include VMT analysis methodology and thresholds. The City guidelines have established thresholds based on guidance/substantial evidence prepared in the WRCOG and City of Menifee Implementation Studies. A project would result in a significant project-generated VMT impact if either of the following conditions are met:

1. The baseline project-generated VMT per service population exceeds the County of Riverside General Plan Buildout MVT per service population; or
2. The cumulative project-generated VMT per service population exceeds the County of Riverside General Plan Buildout VMT per service population.

Utilizing the Origin Destination OD/VMT per service population methodology for County General Plan Buildout and utilizing RIVTAM, the County VMT/Service Population threshold is 35.68.

The project's effect on VMT would be considered significant if it resulted in either of the following conditions to be satisfied:

1. The baseline link-level Citywide boundary VMT per service population to increase under the plus project condition compared to the no project condition, or
2. The cumulative link-level Citywide boundary VMT per service population to increase under the plus project condition compared to the no project condition.

While the requirements of SB-743 is only applicable to automobile traffic, based on discussion with City staff, the VMT reported in this analysis includes both automobile and truck VMT.

VMT SCREENING

The City of Menifee includes the following screening thresholds:

Transit Priority Area (TPA) Screening. 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. The project does not fall under a transit priority area. In fact, as of July 1, 2020, no Transit Priority Areas exist in the City of Menifee.

Low VMT Area Screening. Residential and office projects located within a low VMT-generating area are presumed to have a less than significant impact absent substantial evidence to the contrary. Based on the WRCOG screening tool, the jurisdictional average 2012 daily total VMT per service population was 30.99 miles while the VMT for the Project TAZ was 80.97 miles. The project TAZ is largely vacant which could be a reason for the unusually high VMT reported in the screening tool – but based on the screening tool, the project does not qualify to be screened out.

Project Type Screening. This is primarily applicable to local serving uses. The project does not qualify.

Therefore, the project does not screen out from a detailed VMT analysis.

VMT ANALYSIS METHODOLOGY

The analysis methodology for the project generated VMT and project effect of VMT were developed consistent with the City VMT guidelines.

Socio-Economic Data. The project socio-economic data (SED) was based on median factors for Riverside County from the SCAG Employment Density Survey (October 31, 2001). The SCAG Study recommends a factor of 819 square feet per employee for warehousing uses and 598 square feet per employee for office uses. While the SCAG survey was conducted prior to the proliferation of high cube warehouses (both short-term transload facilities and e-commerce facilities), the employee forecasts resulted in slightly higher employee generation for the project. For example, the typical square feet/employee for short term transload facilities is approximately 2000 square feet/employee, and the typical square feet/employee for e-commerce facilities is approximately 850 square feet/employee. Since higher employment typically results in higher VMT/Capita for project generated VMT, the factors from the SCAG Study results in more conservative estimates. Income groups were kept consistent with the transportation employment factors included in RIVTAM.

Other Edits. No network edits were made for the project beyond using a spare zone for the project, which isolated the project in a separate zone.

Model Runs. Each model was run for 5 loops, and the convergence criteria was set at 0.01. Final assignment runs were completed.

Model Outputs. The model outputs were compared to trip generation of similar facilities included in the RIVTAM. The results were found to be consistent. It should be noted that model trip generation for warehousing projects generally do not correspond to the trip generation included in surveys such as the *ITE Trip Generation*, or the *TUMF High-Cube Warehouse Trip Generation Study (WRCOG, January 2019)*. The model trip generation rate was higher than the trip generation rate included in the WRCOG Study but lower than the rates included in the ITE, which is typical. In fact, the model forecasts different trips for all land uses (including common land uses such as single-family homes or retail) depending on the location. All model data have to be checked for reasonableness, and in this case, the total trip generation from the model was deemed to be reasonable since the data showed a trip generation between the ITE and WRCOG rates. One discrepancy in the model was that the truck trip generation was not reflective of truck trips generated by e-commerce facilities. Therefore, truck trip generation was adjusted during the post processing stage (discussed below) but conservation of trips was maintained by increasing the number of automobile trips.

VMT data was extracted using the time-of-day OD matrices multiplied by the time-of-day skims. Per standard modeling practice, the data reported is daily weekday VMT.

Model Data Post-Processing. The model outputs were reviewed and post processed using standard modeling practice to address discrepancies in truck trip generation. Trip generation in the model is significantly higher than rates for e-commerce uses included in published sources. To account for the significantly lower truck trips generated by e-commerce uses, the truck traffic from the model

was reduced to reflect actual observed truck traffic. Truck trip generation was corrected during post-processing of the model results, by applying truck percentages from published sources. The number of truck trips reduced from the model data was added back in as passenger cars which resulted in an increase in the number of automobile trips. This approach provides a more representative analysis of the project VMT and also maintains conservation of trip generation.

The RIVTAM has a base year of 2012 and a future year of 2040. To obtain current year (2021) VMT, the values from 2012 and 2040 were interpolated to year 2021. The post processing worksheet is included in Attachment A.

PROJECT GENERATED VMT

The project generated VMT compares the project generated VMT per service population to the County of Riverside General Plan Buildout VMT per service population under baseline and year 2040 conditions.

Table A shows the project VMT per service population for the model base year (2012), Cumulative (2040), and baseline (2021) conditions. As shown in Table A, the project generated VMT is 30.95 miles/SP in the base year model, 35.58 miles under year 2040, and 33.14 miles under year 2021 conditions. Based on the City's guidelines, the threshold for impacts is 35.68 miles, and therefore, the project has a less than significant impact under project generated VMT.

Table A - Project Generated VMT

	2012 (Model Base)	2040 (Cumulative)	2021 (Baseline)
VMT	62,269	71,596	66,687
Service Population	2,012	2,012	2,012
VMT/SP	30.95	35.58	33.14
Threshold	35.68	35.68	35.68
Impact?	No	No	No

PROJECT EFFECT ON VMT

The project effect on VMT compares how the project changes VMT on the Citywide network and compares it to the no project condition. Table B summarizes the outputs. As shown in Table B, the project reduces VMT within the City boundary under all scenarios. Based on the City thresholds, a project would have a significant effect on VMT if the baseline link-level Citywide boundary VMT per service population increases under the plus project condition compared to the no project condition. The plus project VMT per service population is lower than the no project condition, in all analysis scenarios, and therefore, the project has a less than significant impact. This finding is reasonable since the project improves the jobs-to-housing ratio within the City.

Table B - Core 5 Warehouse - Roadway VMT Within the City of Menifee

2012 (Model Base)	With Project	Without Project	Difference	Percent Difference
Roadway VMT	1,111,643	1,115,521	(3,878)	-0.3%
Service Population	93,437	91,425	2,012	2.2%
VMT per service population	11.90	12.20	(0.30)	-2.5%
2040 (Cumulative)	With Project	Without Project	Difference	Percent Difference
Roadway VMT	1,849,930	1,867,665	(17,735)	-0.9%
Service Population	141,526	139,514	2,012	1.4%
VMT per service population	13.07	13.39	(0.32)	-2.4%
2021 (Baseline)	With Project	Without Project	Difference	Percent Difference
Roadway VMT	1,348,949	1,357,282	(8,332)	-0.6%
Service Population	108,894	106,882	2,012	1.9%
VMT per service population	12.39	12.70	(0.31)	-2.5%

CONCLUSION

The baseline project VMT per service population is 33.14 miles and the cumulative project VMT is 35.58 miles, which are both lower than the threshold of 35.68 miles. Further, the project reduces VMT within the City boundary under baseline and cumulative conditions. Therefore, the project will have a less than significant impact on VMT.

Attachment A1 - Model Calculations & Post Processing

Model Outputs

Tot_emp	2012
MS_HBWA_VMT	27345.9624
MS_HBP_VMT	0
MS_TotP_VMT	4041.39859
MS_TotA_VMT	33234.4384
OD_CarP_VMT	25326.6294
OD_CarA_VMT	24511.0027
OD_CarP_Trps	2182.9
OD_CarA_Trps	2062.19
OD_TrkP_VMT	16633.8119
OD_TrkA_VMT	16628.304
OD_TrkP_Trps	807.77
OD_TrkA_Trps	807.77
OD_TotP_VMT	41960.4413
OD_TotA_VMT	41139.3067

Core 5 Warehouse - Trip Generation and Average Trip Length (Cars and Trucks)

2012	Cars	Trucks
OD VMT (Row + Column)	41,797	33,034
OD Trips (Row + Column)	3,815	1,615
OD Average Trip Length	10.95	20.45
Truck Trip %	29.7%	

2040	Cars	Trucks
OD VMT (Row + Column)	49,838	33,262
OD Trips (Row + Column)	4,245	1,616
OD Average Trip Length	11.74	20.59
Truck Trip %	27.6%	

TIA	Cars	Trucks
OD VMT (Row + Column)	8,279	470
Truck Trip %	5.37%	

Post Processing Calculations

Project VMT			
	T+C	Cars	Trucks (5.37%)
2012			
Trips	5,431	5,139	292
VMT	62,268.82	56,297.69	5,971.12
VMT/SP	30.95		
2040			
Trips	5,861	5,546	315
VMT	71,595.89	65,110.40	6,485.49
VMT/SP	35.58		
2021			
Trips	5,635	5,332	303
VMT	66,686.90	60,472.13	6,214.77
VMT/SP	33.14		

Attachment A2 - City of Menifee Modeling Questionnaire

Was the Model run correctly?	
• Was the minimum number of loops (5) run?	Yes
• Was the minimum assignment convergence criteria set (0.01) ?	Yes
• Was final assignment completed?	Yes
• Were the input files updated correctly?	Yes
• Socio Economic Data Source	SCAG Employment Density Study
• Was the model roadway network drawn correctly?	Yes
• Was the scale of the changes in model runs between No Project scenario and Project scenario consistent with the project?	Yes
• Was the project isolated in its own TAZ to isolate the project VMT?	Yes
Is the modeled project representative of the proposed project?	
• Was the truck model updated appropriately?	N/A for Project Level Analysis
• Was the roadway network in the project vicinity detailed enough to appropriately reflect the effects of the project?	Yes
• Is the total trip generation and trips by trip purpose consistent with the project land use?	Yes, except truck trip percentages. This was addressed during post processing.
• Do the average trip lengths make sense based on the project location and access to homes, employment centers, and goods and services?	Yes
• Are the project VMT estimates presented as total VMT per service population?	Yes
How was VMT extracted?	
• Were the time of day OD matrices multiplied by the time of day skims?	Yes
• Does the project effect on VMT assessment reasonable?	Yes
» Does the proposed project increase or decrease an existing jobs-to-housing ratio? Does the proposed project provide a needed retail service that the project area is currently lacking?	Improves Jobs Housing Ratio
» Are the VMT estimates presented as total VMT per service population performed using the boundary method with City of Menifee City Limits as the boundary? Is a different boundary more appropriate for the proposed project?	Yes. City of Menifee boundary was used.

APPENDIX 9.11.3

ALTERNATIVE TRIP GENERATION TABLES

Table 1: Trip Generation Rates

High-Cube Transload and Short-Term Storage Warehouse

Vehicle Type	PCE Factor ¹	Estimated Mix ²	Units ³	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Trip Generation Rates (classification, non-PCE) ⁴										
<i>Passenger Cars</i> ⁵	-	-	KSF	1.18	0.052	0.008	0.060	0.023	0.067	0.09
<i>2-axle Trucks</i>	-	16.7%		0.037	0.002	0.002	0.003	0.001	0.001	0.0017
<i>3-axle Trucks</i>	-	20.7%		0.046	0.002	0.002	0.004	0.001	0.001	0.002
<i>4-axle Trucks</i>	-	62.5%		0.138	0.006	0.006	0.013	0.003	0.003	0.006
Total		100%		1.4	0.062	0.018	0.08	0.028	0.072	0.1
Calculated Trip Generation Rates (PCE)										
<i>Passenger Cars</i> ⁵	1	-	KSF	1.18	0.052	0.008	0.06	0.023	0.067	0.09
<i>2-axle Trucks</i>	1.5	16.7%		0.06	0.002	0.003	0.005	0.001	0.001	0.002
<i>3-axle Trucks</i>	2	20.7%		0.09	0.004	0.004	0.008	0.002	0.002	0.004
<i>4-axle Trucks</i>	3	62.5%		0.41	0.018	0.019	0.037	0.009	0.010	0.019
Total		100%		1.74	0.076	0.034	0.11	0.035	0.08	0.115

¹ PCE factors per San Bernardino County Transportation Authority

² Truck mix per High-Cube Warehouse Vehicle Trip Generation Analysis, ITE (2017); Warehouse Truck Trip Study, SCAQMD (2014)

³ KSF = 1,000 square feet gross floor area

Table 2: Trip Generation Rates
Warehousing

Vehicle Type	PCE Factor ¹	Estimated Mix ²	Units ³	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Trip Generation Rates (classification, non-PCE)⁴										
<i>Passenger Cars</i> ⁵	-	-	KSF	1.140	0.121	0.030	0.150	0.036	0.124	0.16
<i>2-axle Trucks</i>	-	16.7%		0.100	0.002	0.002	0.003	0.003	0.002	0.005
<i>3-axle Trucks</i>	-	20.7%		0.124	0.002	0.002	0.004	0.003	0.003	0.006
<i>4-axle Trucks</i>	-	62.5%		0.375	0.007	0.006	0.013	0.010	0.009	0.019
Total		100%		1.74	0.131	0.039	0.17	0.051	0.139	0.19
Calculated Trip Generation Rates (PCE)										
<i>Passenger Cars</i> ⁵	1	-	KSF	1.14	0.121	0.030	0.151	0.036	0.124	0.16
<i>2-axle Trucks</i>	1.5	16.7%		0.15	0.003	0.002	0.005	0.004	0.004	0.008
<i>3-axle Trucks</i>	2	20.7%		0.25	0.004	0.004	0.008	0.006	0.006	0.012
<i>4-axle Trucks</i>	3	62.5%		1.13	0.020	0.018	0.038	0.029	0.027	0.056
Total		100%		2.67	0.148	0.054	0.202	0.075	0.161	0.236

¹ PCE factors per San Bernardino County Transportation Authority

² Truck mix per High-Cube Warehouse Vehicle Trip Generation Analysis, ITE (2017); Warehouse Truck Trip Study, SCAQMD (2014)

³ KSF = 1,000 square feet gross floor area

Table 3: Project Trip Generation

Menifee Commerce Center - Building 1

Vehicle Type	PCE Factor ¹	Units ²	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Proposed Project Trip Generation (classification, non-PCE)									
<i>Passenger Cars</i>	-	1,254 KSF	1,480	65	10	75	29	84	113
<i>2-axle Trucks</i>	-		46	2	2	4	1	1	2
<i>3-axle Trucks</i>	-		57	3	3	6	1	1	2
<i>4-axle Trucks</i>	-		173	8	8	16	4	4	8
Total				1,756	78	23	101	35	90
Passenger Car Equivalent (PCE) Project Trip Generation									
<i>Passenger Cars</i>	1	1,254 KSF	1,480	65	10	75	29	84	113
<i>2-axle Trucks</i>	1.5		69	3	3	6	2	2	4
<i>3-axle Trucks</i>	2		114	6	6	12	2	2	4
<i>4-axle Trucks</i>	3		519	24	24	48	12	12	24
Total				2,182	98	43	141	45	100

¹ PCE factors per San Bernardino County Transportation Authority

² KSF = 1,000 square feet gross floor area

Table 4: Project Trip Generation

Menifee Commerce Center - Building 2

Vehicle Type	PCE Factor ¹	Units ²	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Proposed Project Trip Generation (classification, non-PCE)									
<i>Passenger Cars</i>	-	386 KSF	440	47	11	58	14	48	62
<i>2-axle Trucks</i>	-		39	1	1	2	1	1	2
<i>3-axle Trucks</i>	-		48	1	1	2	1	1	2
<i>4-axle Trucks</i>	-		145	3	2	5	4	3	7
Total				672	52	15	67	20	53
Passenger Car Equivalent (PCE) Project Trip Generation									
<i>Passenger Cars</i>	1	386 KSF	440	47	11	58	14	48	62
<i>2-axle Trucks</i>	1.5		59	2	2	4	2	2	4
<i>3-axle Trucks</i>	2		96	2	2	4	2	2	4
<i>4-axle Trucks</i>	3		435	9	6	15	12	9	21
Total				1,030	60	21	81	30	61

¹ PCE factors per San Bernardino County Transportation Authority

² KSF = 1,000 square feet gross floor area

Table 5: Project Trip Generation

Menifee Commerce Center - Total Project (no fulfillment center)

Vehicle Type	PCE Factor ¹	Units ²	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Proposed Project Trip Generation (classification, non-PCE)									
<i>Passenger Cars</i>	-	1,640 KSF	1,920	112	21	133	43	132	175
<i>2-axle Trucks</i>	-		85	3	3	6	2	2	4
<i>3-axle Trucks</i>	-		105	4	4	8	2	2	4
<i>4-axle Trucks</i>	-		318	11	10	21	8	7	15
Total				2,428	130	38	168	55	143
Passenger Car Equivalent (PCE) Project Trip Generation									
<i>Passenger Cars</i>	1	1,640 KSF	1,920	112	21	133	43	132	175
<i>2-axle Trucks</i>	1.5		128	5	5	10	3	3	6
<i>3-axle Trucks</i>	2		210	8	8	16	4	4	8
<i>4-axle Trucks</i>	3		954	33	30	63	24	21	45
Total				3,212	158	64	222	74	160

¹ PCE factors per San Bernardino County Transportation Authority

² KSF = 1,000 square feet gross floor area